

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.

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

Write Joday THE FIRST REALLY NEW TREASURE LOCATOR IN 30 YEARS!

D-TEX ELECTRONICS P. O. BOX 451 F-9

Garland, Texas 75040

614 EASY ST. - PH. 272-2622

WILLIAM KNYVETT, PUBLISHER-EDITOR

GEORGE BRAGA, Art Director

MARY FRANCES STRONG, Field Trip Editor

JACK PEPPER, Special Feature Editor

ENID C. HOWARD, Associate Editor

F. A. BARNES, Utah Associate Editor

GLENN VARGAS, Lapidary Editor

K. L. BOYNTON, Naturalist

MARVEL BARRETT, Circulation Manager



Volume 36, Number 10

OCTOBER 1973

FEATURES



THE COVER: The Canyon Tree Frog in a dramatic close-up by Norwood Hazard of Idyllwild, California.

THE OLD STORE 10 Enid Howard

DESERT HAM Robert Hyatt

NEVADA NOSTALGIA Al Waterman

ORGAN PIPE | Jack Pepper

NEW MEXICO'S PUYE CLIFFS 22 Buddy Mays

MY DESERT Robert Hiltunen

GREAT MOJAVE'S PROVIDENCE MOUNTAIN REGION 28 Mary Frances Strong

ROCKHOUNDING IN SOUTHEAST UTAH 36 F. A. Barnes

DEPARTMENTS

PEEK IN THE PUBLISHER'S POKE William Knyvett

BOOKS FOR DESERT READERS Book Reviews

BOOK CATALOG Offerings for Fall '73

DESERT SHOPPER New Items of Interest

RAMBLING ON ROCKS Glenn and Martha Vargas

LETTERS TO THE EDITOR Readers' Comments

CALENDAR OF WESTERN EVENTS 46 Club Activities

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.

your metal locator 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.



- 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.



General Electronic Detection Co.

16238 Lakewood Boulevard Bellflower, California 90706

A Peek in the Publisher's Poke

A RULE we do not accept essays but there is always the exception. Into this category falls Robert Hiltunen's manuscript that is featured in our centerfold this month. For all who read this magazine the desert area has a special appeal and Mr. Hiltunen has put down in words just what he feels in My Desert. To me, it is beautiful, and I hope that it will evoke some peaceful thoughts in these troubled times.

On the nature side, Robert Hyatt tells us about the "Desert Ham" and a basketshooting raccoon and some light moments when he had one as a pet.

Our Field Trip Editor, Mary Frances Strong, has a great article on the Providence Mountain region which should appeal to just about every type of outdoor enthusiast. The rockhounds especially will delight in a never-before-published area of opal, agate and jasp-agate.

Rockhounds get another bonus with F. A. Barnes' article on collecting in the southeastern part of Utah. The Beehive state has long been a collector's paradise.

Special Feature Editor, Jack Pepper, has us go along with him on a trip through Organ Pipe National Monument and for the ghost town buffs, Al Waterman takes us to Austin and Eureka in Nevada.

Just about the only thing missing is Russ Leadabrand, who took an extended trip to Mexico but will be back with us in the next issue.

I hope to meet many of you at the 6th Annual National Prospectors and Treasure Hunters Convention. Sponsored by the Prospectors Club of Southern California, it will be held October 6 and 7 at California City. Calif. Come join in the fun!

BACK ISSUE SPECIAL

Complete
'65 '66 '67 '68 '69
VOLUMES
SOLUMES
EACH

1970
VOLUME
SOMPLETE

VOLUME
COMPLETE

VOLUME
SALOO
COMPLETE

Mail all orders to: DEPT. T DESERT Magazine Palm Desert, Calif. 92260

Personal check or money order must accompany your order. Be sure to include your zip code.

Desert Magazine

Books for Desert

All books reviewed are available through Desert Magazine Book Shop

RELICS OF THE REDMAN RELICS OF THE WHITEMA by Marvin and Helen Davis

Hundreds of pictures and relics and the prices they might bring are illustrated in color and black and white following the introductory pages of each of these books. Each complements the other, though different in content and historical background.

Marvin and Helen Davis offer some sage advice on how and where to collect Indian and early American relics. They say that no matter what part of the country you live in, there are Indian relics to be found, and that in the search for any kind of relics, a thorough study of the history of the inhabitants be made, whether it be Indian or early white man. They strongly suggest that the relic hunter learn where the settlers built their villages since these are the most logical places to begin a search.

Relics of all kinds are becoming increasingly hard to find, thus making many of them almost priceless in value, especially those of the Indians.

Lovely photos and short informative captions make for a clear understanding of what the hobbyist or serious hunter would need to know about his search. In addition, there is some good advice (and caution) as to "good manners" among collectors and, above all, one should have courtesy to get permission for a search on private or restricted properties.

Paperback, well illustrated, both books contain 63 pages, and are priced at \$3.95 each.

UTAH by David Muench Text by Hartt Wixom



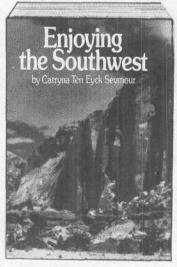
It is here in Utah that a rugged land challenged a rugged people. How they met that challenge is a unique story, unrivaled in the New World. The reader can perceive through expressive photographs and writing why the Mormon pioneers of 1847 called Utah the Promised Land. Effort is made not only to log what they did, but gain an insight into how they did it against formidable odds.

This collection of landscapes and illuminating words is a most beautiful under-one-cover profile of Utah. Taking center stage is the rich experience of magnificent grandeur found in five national parks, scores of national monuments and recreational areas, and the unexplored back country. In addition, the little things which make up the Beehive State are not forgotten.

The impressions captured here with David Muench's camera and Hartt Wixom's pen are little different from those of the first explorers. See with Muench the dramatic landscapes of Utah . . . the rock art of ancient Indians, the splash of changing seasons, the fragile beauty of alpine life and the contrasting qualities of Canyonlands. Wixom unfolds the story about how the last major mountain range and river in the United States finally took their places on the maps. Then, too, the trophy-trout and wildlife are a part of this story. Discover the geology, geography, history and human resources of Utah. Here, everything you wanted to know about Utah is found in one book.

Hardcover, large ((11 x 14) format, 188 pages, well illustrated, \$25.00. (\$22.00 until January 1, 1974.)

FOR A COMPLETE LINE OF BOOKS AND MAPS ON WRITE FOR ILLUSTRATED FREE BROCHURE HIGH DESERT BOO P. O. BOX 161 LITTLEROCK, CALIF. 93543



Your passport to a memorable

Do you want to vacation off the beaten track? Find the sights that aren't spoiled by hordes of tourists? See the real Southwest as the Indians and the pioneers knew it? Then ENJOYING THE SOUTHWEST by Catryna Ten Eyck Seymour is the guidebook for you.

Mrs. Seymour puts her emphasis on the little-known places, where ancient Indian traditions and natural scenery can best be observed. But she also offers pointers on visiting the standard tourist spots while avoiding the mobs and the distractions.

She describes accommodations, lists interesting side trips, and offers valuable shopping tips. Finally, there is a detailed "how-todo-it" section with helpful hints on camping out. Every chapter of this book is illustrated with clear, easy-to-read maps and attractive drawinas.

Senator Barry Goldwater calls ENJOYING THE SOUTHWEST "a real addition to the growing library on Southwestern America . . extremely accurate and valuable." Order your copy today.

At all bookstores or use coupon below. Cloth \$7.95,

-	
East Wasl Philadelp Send me copies h and/or (\$3.50 ea SOUTHW to return days of d fund. I en	D-1073 PINCOTT COMPANY hington Square, hia, Pa. 19105 , postage paid
Name	
Address_	
City	
State	Zip
N. Dak.,	s of Pa., N.J., N.Y., N.C. Ark., Cal., Tenn., please and local taxes.
	MACONDO AND AND AND INVESTIGATION

FALL 1973

CATALOG - PART 2

ALL OF MEXICO AND GUATEMALA by Norman D. Ford. The Guide that rates the choice hotels and restaurants of both Mexico and Guatemala by price. For as little as \$6 a day you can stay at little posadas or inns, meals included. A complete travel book on places that boast more ancient history and culture than the rest of the Western hemisphere combined. Paperback, 200 pages. \$2.00.



MAMMALS OF DEEP CANYON by R. Mark Ryan. A study of the habits of more than 40 animals living in the Deep Canyon Research Area in the Colorado Desert. The site was selected because its ecology is typical of deserts throughout the world. Paperback, illustrated, 137 pages, \$2.95.

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

OREGON COAST with photos by Ray Atkeson and text by Archie Satterfied. The finest collection of four-color photographs of the magnificent shoreline ever presented. Excellent historic text. paper, 124 pages. Large 11x14 format, hard cover, \$22.00.

TRAVEL GUIDE TO ARIZONA by Editors of Sunset Books. Beautiful photographs descriptive material, history and up-to-date maps make this an excellent tour guide to both the northern and southern sections of Arizona. Large Sunset format, four-color cover, heavy paperback, 96 pages, \$1.95.

TRAVEL GUIDE TO NEVADA by Editors of Sunset Books. Also the same format and size as their Arizona (above) and Utah Guide Books. \$1.95.

GUIDEBOOKS TO CALIFORNIA AREAS by Russ Leadabrand. These books are exactly the same format and price (\$1.95 each) as Leadabrand's books described above. The five different guides are: Guidebook to San Bernardino Mountains. Guidebook to Sunset Range, Guidebook to Mojave Desert and Guidebook to Southern Sierra Mountains. ORDER EACH BY COMPLETE TITLE.

OLD MINES OF SOUTHERN CALIFORNIA. Reprinted from the Report of the State Mineralogist, 1893. Limited to 1000 copies, and included in this detailed accounting are desert, mountain and coastal areas as well as those of Calico-Salton Sea, Colorado River Districts and Southern Counties. Sketches of many mines. Paperback, 96 pages, \$3.00.

BOOKS OF

BIRDS OF THE SOUTHWESTERN DESERTS by Gusse Thomas Smith. Thirty-one of the most commonly sighted birds of the Southwest are described and illustrated in 4-color artist drawings. Heavy paperback, 68 pages, \$3.50.

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.

CAMPING HANDBOOK by Editors of Sunset Books. Complete information on how to go camping without making it a drudgery. Includes selecting and transporting equipment, public and private campgrounds, maps, types and renting of vehicles, cooking, etc. Large Sunset format, illustrated, paperback, 96 pages, \$1.95.

TRAVEL GUIDES TO BAJA CALIFORNIA by Ken and Caroline Bates. Published the Editors of Sunset Books, this is a useful book on Baja and should be a companion piece to Gerhard and Gulick's Lower California Handbook and Cliff Cross's Baja by Road, Airplane and Boat. The Bates' book takes the reader to the people with text, photographs and maps. Anyone going to Baja should have all three books. Large 8x10 format, heavy paperback, 80 pages, \$1.95.

50 YEARS IN DEATH VALLEY by Harry P. Gower. First hand account of the dramatic mining years by a man who spent his life in the mysterious valley. Describes the famous characters of Death Valley, Paperback, illustrated, 145 pages, \$2.95

GREENWATER by Harold Weight. Called the "monumental swindle of the century" this is the story of the 1906 stampede to the Black Mountains and how \$30,000,000 disappeared. Paperback, historic photos, 34 pages. \$1.00.

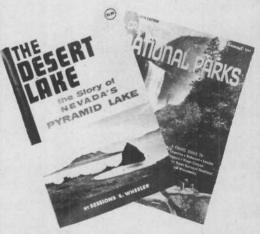


SOUTHWEST INDIAN COUNTRY by the Editors of Sunset Books. A concise and comprehensive guide covering the 48 reservations and Pueblo villages in Arizona, Utah, New Mexico and Colorado. Includes what to see, how to buy, conduct, history, and ceremonials. Large format, colored illustrations, heavy paperback, 80 pages, \$1.95.

RHYOLITE by Harold Weight. Tales of Shorty Harris, Ernest Cross, Bob Montgomery, M. M. Beaty and the men and women who estabished the famous mining town near Death Valley. Paperback, historic photos, 40 pages. \$1.00 THE MAN WHO WALKED THROUGH TIME by Colin Fletcher. An odyssey of a man who lived simply and in solitude for two months as he hiked through the Grand Canyon. Combining his physical prowess with Thoreau-like observations, the author has written a book of great magnitude. Hardcover, illustrated, 239 pages, \$6.95.

AMATEUR GUIDE TO BOTTLE COLLECTING by Bea Boynton. Popular little book for beginners. Highly recommended. Paper. \$1.00.

BOTTLE RUSH U.S.A. by Lynn Blumenstein. An excellent book for identifying old bottles with photographs of over 700 items and current price list. Background bottle information. 184 pages, paperback, \$4.25.



OLD MINES AND GHOST CAMPS OF CALIFORNIA, compiled by A. Ekman, I. H. Parker, W. H. Storms, H. W. Penniman and M. E. Dittmar. A lot of informative reading takes you county by county through the vast mining areas of the Mother Lode and adjoining rich properties. Paperback, photos, 144 pages, \$3.50.

NEVADA LOST MINES AND HIDDEN TREASURES, compied by Dave Basso. The Second Edition, Oct. 1972, is updated with photographs and a new look. Portions of U.S. Geological Survey topographic maps are provided to give the reader an idea of the general locale in which the specific story is centered. Paperback, 71 pages, \$2.50.

THE DESERT LAKE (The Story of Nevada's Pyramid Lake) by Sessions S. Wheeler. According to this author, the parent of Desert Lake was born approximately 70,000 years ago. The large lake was named Lahontan and responded to many changes over the last 8 to 9,000 years such as ice sheets, flooding and dry stages. It is geologically concluded that during its low stages, the deepest of its "puddles" was the desert lake, Pyramid. Archeologists have discovered a population of humans lived in caves along the lakeshore and are called the "Lovelock Culture." Fishing, boating, Paiute Indian lore make this a land of contrasts and endless exploration. Paperback, ill., 135 pages, \$2.50.

THE HINGES OF DESTINY by Ben Lee Parker. A true story of ranch life in the early 20th Century, Ben Lee Parker's life in Texas was crowded with outdoor excitement and adventure. He takes the reader to another era, to a kind of life no longer lived in America, now taken over by concrete, asphalt and tourist attractions. Hardcover, illus., 149 pages, \$5.00.

Desert Magazine

THE WEST

THREE PATHS ALONG A RIVER by Tom Hudson. The San Luis Rey River in California's San Diego County played an important part in the history of the West. Dramatic account of the Indians, Spaniards and Americans who settled the area. Hardcover, 239 pages, \$6.00.

GHOSTS OF THE GOLD RUSH by George Koenig. To really enjoy a trip through California's Mother Lode Country one should have a knowledge of the historical background and a guide places to see. This travel and historical guide gives this information in a concise and interesting manner. Paperback, illustrated, 72 pages, \$1,95.

GOLD RUSH COUNTRY by the Editors of Sunset Books. A revised and up-dated practical guide to California's Mother Lode country. Divided into geographical areas for easy weekend trips, the 8x11 heavy paperback new edition is profusely illustrated with photos and maps. Special features and anecdotes of historical and present day activities. 4-color cover 96 pages. \$2.95.



ANTIQUE BOTTLES by Marvin and Helen Davis. Paperback, full color, 62 pages, \$3.00.

A GUIDEBOOK TO THE SOUTHERN SIERRA NEVADA by Russ Leadabrand. Illustrated with good photographs and maps, this volume covers the Sierra region south of the Sequoia National Park, including most of the Sequoia National Forest. Paperback, \$1.95.

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.

MINES OF THE EASTERN SIERRA by Mary De-Decker. Facts about the mines on the eastern slope of the Sierra Nevada and Inyo Mountains. Paper. \$1.95.

THE SALTON SEA Yesterday and Today by Mildred de Stanley. Includes geological history, photographs and maps, early exploration and development of the area up to the present. Paperback, 125 pages. \$1.00.

OUT FROM LAS VEGA5 by Florine Lawlor. Only a few miles from the gambling casinos and neon lights of Las Vegas are four-wheel-drive trails and passenger car roads rich in history and scenery. Paperback, illustrated, 36 p. \$1.00

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 he 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.

MINES OF THE HIGH DESERT by Donald Dean Miller. Describes life at the New Dale, Virginia Dale, Supply and other early mines of the high desert country around Joshua Tree National Monument in California. Photos and map. Paper back. \$1.95.

LAS VEGAS (As It Began—As It Grew) by Stanley W. Paher. Here is the first general history of early Las Vegas ever to be published. The author was born and raised there in what, to many, is considered a town synonymous with lavish gambling and unabashed night life. Newcomers to the area, and even natives themselves, will be surprised by the facts they did not know about their town. Western Americana book lovers will appreciate the usefulness of this book. You don't have to gamble on this one! Hardcover, large format, loaded with historical photos, 180 pages, \$10.95

DESERT GARDENING by the Editors of Sunset Books. A "how to" book on what is different about gardening in the desert. A thorough and helpful book, it covers areas of Arizona's High Desert, High Desert of New Mexico and Texas, California's Medium to High Desert, Arizona's Intermediate Desert and Low Desert of California and Arizona. Paperback, illus., 96 pages, \$1.95.

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.



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 landwarks make it easy for a reader to identify locations. Illustrated with photos and digrams. Paperback, 214 pages, \$4.00.

BYROADS OF BAJA by Walt Wheelock. In addition to describing the many highways now being paved, this veteran Baja explorer also tells of back country roads leading to Indian ruins, missions and abandoned mines. Norte Americanos will love this adventure, in armchair, passenger car, or 4WD. Paperback, illus.. 72 pages. \$1.95.

USE ORDER COUPON ON PAGE 45

CALIFORNIA RESIDENTS PLEASE ADD 6% SALES TAX

ROCKS AND MINERALS, A Golden Nature Guide. More than an aid to identifying rocks and minerals, this book will also help the reader understand the importance of rocks and minerals in our daily lives. Tells where to look for rocks and minerals such as man-made exposures of hills, quarries, rock pits, road and railroad cuts, etc. Compact paperback, profusely illustrated, 160 pages, \$1.25.

HOPI KACHINA DOLLS (With a Key to Their Identification), by Harold S. Colton. Kachina dolls are neither toys nor idols, but aids to teaching religion and tradition. This is a definitive work on the subject, describing the meaning, the making and the principal features of 266 varieties of Kachina dolls. Line drawings of each variety, plus color and b/w photographs make it a complete guide to learn more of the richness of American Indian culture. Paperback, 150 pages, \$3.45.

A NATURALISTS DEATH VALLEY by Dr. Edmund C. Jaeger. In this revised third edition, Dr. Jaeger covers and uncovers some of the mysteries of this once humid, and now arid trough. He tells of the Indians of Death Valley, the mammals, birds, reptiles, amphibians, fishes, insects, trees, wild flowers and fossils. Paperback, 66 pages, \$1.50.



EXPLORING DEATH VALLEY by Ruth Kirk. Good photos and maps with time estimates from place to place and geology, natural history and human interest information included. Paperback. \$2.25.

CALIFORNIA NATIONAL PARKS by the editors of Sunset Books. This new edition, like other Sunset Books, is well illustrated and gives complete information about California and national parks. Large format, slick paperback, 80 pages, \$1.95.

FLORA OF BAJA NORTE by Tina Kasbeer. The author is a botanist who spends all her free time in Baja and writes in detail of the endemic plants of the country. Describes the use of certain plants for medicinal purposes by the Indians and residents. Paperback, illus., 36 pages, \$1.00.

THE GREAT AMERICAN WEST by James D. Horan. With over 650 illustrations, many in full color, this is the full western story from the days of the conquistadores to the 20th Century. Many rare photos never published before. Large 9 x 12 format, Hardcover, 288 pages, originally pub. at \$10.00, now only \$4.95.

CAMELS AND SURVEYORS IN DEATH VALLEY by Arthur Woodward. A diary-like accounting of the day-by-day experiences of an expedition for a survey of the boundary between California and the territory of Nevada. Paperback, 73 pages, \$2.00.

FALL 1973

CATALOG - PART 2

THE GOLD HEX by Ken Marquiss. A single man's endeavors, Ken has compiled 20 of his treasure hunts in book form. His failure to hit the "jack-pot" does not mean he is treasureless. From gold panning to hardrock, from dredging to electronic metal detecting, he enjoyed a lifetime of "doing his thing." Slick paperback, illustrated with photos and maps, 146 pages, \$4.00.



GEM MINERALS OF IDAHO by John A. Beckwith. Contains information on physical and optical characteristics of minerals; the history, lore, and fashioning of many gems. Also eleven rewarding field trips to every sort of collecting area. Slick paperback, maps and photos, 123 pages, \$2.95.

THEY FOUND GOLD by A. Hyatt Verrill. Treasure hunting is not restricted to the West, as is brought out here. Instead, Verrill deals with his efforts and those of others to locate treasures from sunken ships off the coast of Yucatan and Central America, and ethnological expenditures around the world. Hardcover, illustrated, 267 pages, \$7.50.

THE STERLING LEGEND by Estee Conatser. The story of the Lost Dutchman Mine is in a class of its own. Here the author presents the Jacob Walzer story in a realistic and plausible manner. An introduction by Karl von Mueller, and a map insert leaves the reader to draw his own conclusions between fact and fiction. Paperback, illustrated, 98 pages, \$3.50.

THE NEVADA DESERT by Sessions S. Wheeler. Provides information on Nevada's state parks, historical monuments, recreational areas, and suggestions for safe comfortable travel in the remote sections of western America. Old journals, micro-film copies of early newspapers and memories of living persons make an exciting history of Nevada. Paperback, illustrated, 168 pages, \$2.95.

TRADERS TO THE NAVAJOS by Frances Gillmor and Louisa Wade Wetherill. John and Louisa Wetherill of Kayenta, living among the Navajos from 1900 into the 30s, served the Indians in many ways from historians and school teachers and guides to explorers and archeologists. John Wetherill was the first of two white men to reach Rainbow Bridge. Paperback, 265 pages, \$2.95

BACKPACKING by R. C. Rethmel. Stresses caution and confidence in this popular sport and includes details about equipment, clothing, food and techniques for trail and camp preparation. Good for the novice, too, who wants to go wilderness camping with family or a few friends. Paperback, \$3.95; Hardcover, \$6.95.

A FIELD GUIDE TO WESTERN BIRDS by Roger Tory Peterson. The standard book for field identification sponsored by the National Audubon Society. 2nd edition, enlarged with new section on Hawaiian birds. 658 in full color. Hardcover. \$5.95.

BOOKS OF

DESERT ANIMALS OF THE SOUTHWEST by Richard Clayton. Delightful for children and grown-ups, this little book includes sketches and concise descriptions of animals with accompanying footprints. Covering 38 creatures, it could be used as a game around the campfire. Paperback, illustrated, 78 pages, \$1.95.

EXPLORING CALIFORNIA BYWAYS VOLUME VI OWENS VALLEY by Russ Leadabrand. Trips for a day or a weekend will lead the readers a merry chase in pictures and words up and down the narrow Owens Valley. Your eyes will feast on such attractions as the Alabama Hills, Mono Lake, Mt. Whitney, giant boulders of obsidian at Glass Mountain, Bishop Creek and the now plundered Owens Lake and many, many more. Paperback, illustrated and mapped, bibliography, 126 pages, \$1.95.

WILY WOMEN OF THE WEST by Grace Ernestine Ray. Such women of the West as Belle Starr. Cattle Kate and Lola Montez weren't all good and weren't all bad, but were fascinating and conficting personalities, as researched by the author. Their lives of adventure were a vital part of the life of the Old West. Hardcover, illustrated, 155 pages, \$5.95.



MAP OF PIONEER TRAILS Compiled by Varna Enterprises. Publishers of popular maps on lost mines and ghost towns in California, Varna has released a new large map on pioneer trails blazed from 1541 through 1867 in the western United States. Superimposed in red on black and white, the 37x45-inch map is \$4.00.

A FIELD GUIDE TO THE GEMS AND MINERALS OF MEXICO by Paul Willard Johnson. Tips on food, maps, and information, driving and trailering in Mexco, Border regulations, wrapping specimens of gems and minerals and all about your proposed mining venture are covered. Paperback, many good maps and illustrations, 96 pages, \$2.00.

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.

WEST OF DAWN by Hugh D'Autremont. The author's account of his life of adventure which started in the 1930s during which he looked for lost mines, prospected for gold in Mexico and hardrock mined in California. Reads like a fictional wild west novel. Hardcover, 187 pages,

PALM CANYONS OF BAJA CALIFORNIA by Randall Henderson. The beautiful palm canyons and isolated areas of Baja California are described by the late Randall Henderson, founder of DESERT Magazine. Although these are his personal adventures many years ago, little has changed and his vivid writing is alive today as it was when he first saw the oases. Paperback, illustrated, 72 pages, \$1.95.



CALIFORNIA-NEVADA GHOST TOWN ATLAS and SOUTHWESTERN GHOST TOWN ATLAS by Robert Neil Johnson. These atlases are excellent do-it-your self guides to lead you back to scenes and places of the early West. Some photos and many detailed maps with legends and bright, detailed descriptions of what you will see, also mileage and highway designations. Heavy paperback, each 48 pages, \$2.00.

COINSHOOTING, How and Where To Do It by H. Glenn Carson. This book presents tips and 'tricks' on coinshooting and hunting other items lost by people over the years. Metal detector owners will find their hobby made more profitable, says this veteran "coinshooter." Paperback, illustrated, 58 pages, \$2.50.

THE CAHUILLA INDIANS by Lucile Hooper. Compared to the large tribes of the West, the Cahuillas, although being comparatively small, play an important part in the history of Southern California. Customs, living habits, the cultures of this tribe are better appreciated by the author's insight. First published in 1920, and again in print. Paperback, large format, bibliography, 65 pages, \$2.50.

GUIDEBOOK TO THE FEATHER RIVER COUNTRY by Jim Martin. This is a "must" for recreation enthusiasts eager to relive the discovery of gold in this country. Try your luck at gold panning, fishing, boating, hiking and ice angling as described in this western travel book. Slick paperback, illustrated, 128 pages, \$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.

SOUTHWESTERN INDIAN TRIBES by Tom Bahti. An excellent description, history and current status of the Indians of the Southwest, including dates of their ceremonies and celebrations. Profusely illustrated with 4-color photographs of the Indian Country and the arts and crafts of the many tribes. Large format, heavy paperback, 72 pages, \$2.00.

THE WEST

WESTERN GEM HUNTERS ATLAS by Cy Johnson and Son. A helpful book of detailed maps showing gem and mineral locations, from California to the Dakotas and British Columbia to Texas. Markings note private claims, gem claims (fee charged) and rock and gem locations. Also suggested reading for more detail on areas included and other rich areas not included in his publication. Paperback, maps galore, collector's library, 79 pages, \$3.00.

BACKPACK COOKERY by Ruth Dyar Mendenhall. Full of good ideas for making the most of dedehydrated foods. Paper, \$1.00.

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. \$7.00.

THE ROCKS BEGIN TO SPEAK by LaVan Martineau. The author tells how his interest in rock writing led to years of study and how he has learned that many—especially the complex petroglyphs — are historical accounts of actual events. Hardcover, well illustrated, glossary, bibliography, 210 pages, \$8.95.



THE BEAUTIFUL SOUTHWEST by the Editors of Sunset Books. A pictorial with a brief text showing modern day activities of cities such as Phoenix, El Paso, Taos, and communities below the Mexican border, and covering the Southwestern states, canyons and deserts. 240 photographs of which 47 are four-color, large format, 223 pages, hardcover, \$10.95.

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 11x 14 format, hardcover, heavy slick paper, 128 four-color photographs, 125 pages. \$22.00.

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.

JOURNEY OF THE FLAME by Walter Nordhoff. The most exciting tale of early Baja and Alta California ever written. Recounts lost treasure legends and is accurate historical account presented in fictional style. Hardcover. \$4.95.

GHOST TOWNS OF THE NORTHWEST by Norman D. Weis. The ghost-town country of the Pacific Northwest including trips to many little-known areas, is explored in this first-hand factual and interesting book. Excellent photography. Best book to date on ghost towns of the Northwest. Maps. Hardcover, heavy slick paper, 319 pages. \$6.95.



DESERT GEM TRAILS by Mary Frances Strong. DESERT Magazine's Field Trip Editor has revised and brought up to date her popular field guide for rockhounds. She has deleted areas which are now closed to the public and added new areas not covered before. The maps have also been updated. This is the "bible" for both amateur and veteran rockhounds and back country explorers. Heavy paperback, 80 pages and still the same price, \$2.00.

COMMON EDIBLE & USEFUL PLANTS OF THE WEST by Muriel Sweet. A description with artist drawings of edible (and those not to touch) plants along with how Indians and pioneers used them. Paperback, 64 pages, \$1,50.

REDIGGING THE WEST for old time bottles by Lynn Blumenstein. One of the better bottle books, with 700 photographs. Paperback, \$4.25.

LOST MINES OF DEATH VALLEY by Harold Weight. This is a new approach to the enigma of Death Valley Scotty's life and legends and gives additional insight into the Lost Gunsight and Breyfogle bonanzas, plus other Death Valley mysteries. Paperback, historic photographs, reference material, 86 pages \$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.

SPEAKING OF INDIANS by Bernice Johnston. An authority on the Indians of the Southwest, the author has presented a concise well-written book on the customs, history, crafts, ceremonies and what the American Indian has contributed to the white man's civilization. A MUST for both students and travelers touring the Indian Country. Heavy paperback, 10x7 format, illustrated, 112 pages, \$2.50.

MINES OF DEATH VALLEY by L. Burr Belden. About fabulous bonanzas, prospectors and lost mines. Paperback. \$1.95. USE ORDER COUPON ON PAGE 45

CALIFORNIA RESIDENTS PLEASE ADD 6% SALES TAX

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.

HOW AND HERE TO PAN GOLD by Wayne Winters. Convenient paperback handbook with information on staking claims, panning and recovering placer gold. Maps and drawings. \$2.00.

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.

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.



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.

THE NORTH AMERICAN DESERTS by Edmund C. Jaeger. A long-time authority on all phases of desert areas and life, Dr. Jaeger's book on the North Ameican Deserts should be carried wherever you travel. It not only describes each of the individual desert areas, but has illustrated sections on desert insects, reptiles, birds, mammals and plants. 315 pages, illustrated photographs, line drawings and maps. Hardcover. \$6.95.

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 DESERI Mgazine 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.



by Enid C. Howard



Every old ghost town has its burial grounds, and the epitaphs indicate life was extremely hard for children and law enforcement men. This one reads: Will Cox—age thirty-eight—Peace Officer—Killed in the line of duty. Pearce, Arizona.

T HINGS ARE looking up around Pearce, Arizona, these days. The Old Store is back in business, and population at last count numbered seven bonda fide citizens. It's been a tough climb away from the anonymity of a ghost town, to a respectable tourist attraction. True, life is slow-paced in Pearce, but that is part of its new charm. You will find it on Route 666, between Douglas and Willcox, Arizona.

Around the Gleeson, Courtland, Tombstone mining camps in 1890, underground water had all but stopped work on most of the bonanza strikes, and miners were pulling stakes for richer territory. John James Pearce was one of those who just couldn't make it to support his family mining, so went to ranching in the wide open land northeast of the Tombstone area.

But he still had mining in his head, and one day while scouting the range for grazing land, he topped a hill, dismounted and sat down on a rock ledge where he broke out a can of sardines and a bit of bread. Well, he was always, just for the heck of it, cracking open rocks, and no reason he couldn't do it right there. He cracked a couple, and they were loaded with free gold. Those cracked rocks according to the assayer showed about \$20,000 a ton in silver and \$5,000 in gold.

Pearce partially developed his strike which he named "The Commonwealth," by hard pick and shovel work, then sold it to John Brockman of Silver City. The richness of the ore body at the Common-wealth was fabulous.

A boom town developed around the Commonwealth, and was named Pearce for obvious reasons. The Tombstone, Gleeson, Courtland mining camps had had their glory, and now it was Pearce's turn. It sprouted in 1894, and in a short time was roaring louder than any boom town ever had before. New buildings were put up the quickest way possible to house the increasing population, along with merchandising establishments to supply the needs of miners with plenty of money in their pockets.

The Old Store was built of adobe brick and was the largest adobe structure in southwestern Arizona. Not only the store, but store rooms, stables and feed storage facilities, built around a central court-yard where constructed of adobe, which was plastered with more adobe mixture inside and out and painted or whitewashed. It supplied according to the need, fancies for women and substantials for men, along with trifles for children.

Disaster struck The Commonwealth in 1904 when water at the rate of 4,000,000 gallons a day could no longer be controlled, and Pearce went the way of all the other mining camps in the area. The Old Store continued to function as a place where die-hard desert rats could pick up a can of beans, a spool of thread or gasoline for those new-fangled gas buggies. Much later it became a rock shop for rock hounds who wandered around the southeastern deserts of Arizona.

But The Old Store never gave up, and one fine day John and Ginger Thurman from Lake Bluff, Ill., discovered it, decided that was their thing and bought it. True, the old building had begun to show its age, but that was the charm for the Thurmans. They have within two years and much hard work, reactivated The Old Store as it was 60 years ago. It is a treasure trove of nostalgia.

The Thurmans use the original counters, show cases, and high shelves complete with rolling ladders to reach the high places. John is most proud of his "Cashier's Cage Office," with its well used old roll-top desk and tilt back chair. He can be found there sometimes with his feet on the desk, just being happy!

An incredible amount of stock has been assembled in The Old Store. On display or for sale are contemporary, period,



The Old Store, at Pearce, is the oldest continuously operated merchandise facility in Arizona. The present owners, John and Ginger Thurman have injected new life into the old building by restoring to use many of the original fixtures.

and antique items. They specialize in minerals and rocks, and sell southwestern gifts and curios. Some items like old fashioned glass candy jars full of sweets or licorice sticks—a collection of antique crank telephones—a couple of women's bathings suits, circa 1918, and the old pot-bellied stove, bring smiles and comments from travelers who wander in to browse. The Thurman's motto, "If we have two of something, we'll sell you one if we can find the other."

Ginger has a pet project which she calls, "The Pearce Room." When old-timers around southeastern Arizona heard that The Old Store was on its feet again and doing business at the same old stand,

they brought bits and pieces of the past to Ginger, to either display or purchase. Most important were the old photographs they presented to her. She has had enlarged copies made and framed, and they hang in "The Pearce Room." They are of Pearce and the people who made it Arizona's last big boom town.

In addition, John and Ginger are not too busy to visit and talk about the history of Pearce and the surrounding country. They have created a friendly atmosphere of welcome for all who stop at The Old Store just to browse or to purchase. The Old Store, and John and Ginger Thurman are three of the nicest personalities you will meet in southeastern Arizona.



H E IS THE most dedicated thespian of the woods circuit. On stage he is a clever show-off; off stage a sly trickster. He never removes his mask. He wears it with the same elan as the Hollywood leading man wears his dark glasses. While this affectation is intended to give anonymity to both characters, both know it draws peoples' attention.

Neither is camera shy. Mr. Coon, the fat man of the woodsy stage, gives his best performance when he has an appreciative audience. Look in on him at meal time, which is the most enjoyable moment of his life. In fact, Mr. Coon would rather eat than woo his leading lady. While dining, he'll exhibit epicurean manners.

Say the menu is crayfish, a summer delicacy with him. While Mr. Coon hunts most of his meals, he lets the crayfish hunt him. That is to say, he doesn't take an unfair advantage. He pokes a dainty hand into a stream, while staring around nonchalantly, pretending he doesn't see you, and lets the crayfish nip his fingers. Then, with the decorum of a duchess eating popcorn, he flips the crayfish into his mouth.

His method of opening clams would

arouse the envy of a Cape Cod shellfisherman. He fastidiously inserts a fingernail between the shells, and in one deft sweep lays bare the goodies.

Mr. Coon's widely publicized habit of washing his food has given him a fine but partly undeserved reputation for cleanliness. He really does wash dirt and grit off frogs, and crayfish, and grimy vegetables. Using his nails as Bowie knives, he expertly cleans fish of their innards. But much of his other food is eaten unwashed. When dining on eggs, ripe fruit, or milk-ear corn, he eats on the spot without benefit of washing. He is a remarkable "cob man," and manipulates a roasting ear like an Iowa cornbelt farmer.

A gourmet at table, Mr. Coon is also choosy when selecting a home. He occupies the snug hollows of some of the wilderness community's best neighborhoods — usually the hardwood belts if available, or the desert's finest landscaped areas—and tries to make life a pleasure. And matters have been so arranged that his love life doesn't interfere with his greatest passion: eating.

Such celebrated hunters as the wolf

THE DESERT HAM

by Robert Hyatt

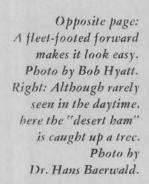
and cougar live far less luxuriously than Mr. Coon. Their meals are often won after weary miles on the hazardous game trails in winter's severest weather. That's getting it the hard way and is not for Mr. Coon, who is no exercise nut. He gorges himself to rotundity come winter, then curls up in his apartment and, nourished by his own flab, snoozes until spring. In this he differs from some Hollywood actors only in that he is not bothered by phone calls and uninhibited actors' agents.

If married, the only thing that may disturb Mr. Coon's winter-long siesta is Mrs. Coon, who has to give some thought to perpetuation of the coonish race. Mating usually takes place in the big sleep period, preferably before the old man gets blearyeyed and churlish from too much slumber.

The young arrive in late spring, and there may be from three to six ugly little coonlets. They develop rapidly and get to be quite handsome fellows in their coonskin coats. They don their lifelong masks at an early age and begin to act out various little skits in everyday life. Bringing up the kiddies to the point where they can join the job hunt and other pastimes is Ma Coon's duty. Papa at that time doesn't share in family life. Instead, he goes wandering as any good trouper should. But there is every indication that he rejoins the family circle in the late summer or fall.

Whether "civilized" or wild, Mr. Coon

Post Control of the C



is a clever thief and becomes, while still a youth, the stickiest-fingered gent in the woods-desert. He quickly learns to open cupboards and drawers with the ease of a safe cracker. I've seen them shinny up bare pipes, open doors by turning knobs, and prankishly turn off the lights by flicking switches.

Wild woods runner coons are no less astute. When raiding henyards, they soon master gate and coop latches, drop onto high window sills from trees and fence posts, and push open windows which have been left unlocked. A coon that snuck into a fishing camp shelter after he'd jimmied an unlatched window enjoyed new gastronomic adventures among preserves, molasses, sugar, chocolate and bottled fruit juices.

A neighbor once stored a crate of oranges under the roof of a shed. Each day he found some of the fruit missing. Blaming the losses on pilfering boys, he padlocked the building. But the oranges continued to vanish. The contents of the crate were nearly exhausted before he identified the culprit—a mother raccoon. Ma Valentine she was. While her four young huddled outside, Ma, squeezed through under the shed's floor. Then, delving into the crate, she lugged oranges to an opening under the eaves, and dropped them to her waiting offspring.

Keller Breland, of Hot Springs, Arkansas, a long-time trainer of animals through a psychological method he calls "behavior engineering," proved that the raccoon is one of the most intelligent critters. He taught one to play basketball with the agility and pinpoint accuracy of a Wilt Chamberlain. I've watched him make 10 baskets in a row without a miss, then sit down to his specially-built baby grand and bang off . . . well, he's no Liberace, but his stance is perfect and there is a tiny candelabra on the piano.

While the coon's life is interesting and pleasurable, it sometimes gets pretty haz-

While the coon's life is interesting and pleasurable, it sometimes gets pretty hazardous. Like when he has a run-in with dogs. The latter don't always come off winner. Sixty-pound dogs are frequently out-slugged by 20-pound coons. Because the coon knows more tricks than a karate expert. This is demonstrated when he

fights a dog in water—which is his favorite battlefield for such pests. Many a good hound has lost his life in this type of warfare.

A big redbone hound of my acquaintance came upon a coon mother and several youngsters on the bank of a river. Using tooth and claw to protect her babies, Ma decoyed the hound to the bank of the river. There, grappling with her adversary, she rolled him into the water, which was deep a: this point. Then employing a strategy often adopted by her kind—and a real sneaky feminine trick it is — she wrapped herself around the poor hound's head and held it under until he drowned.

While living in Arkansas some years ago, my wife and I had a pet coon who

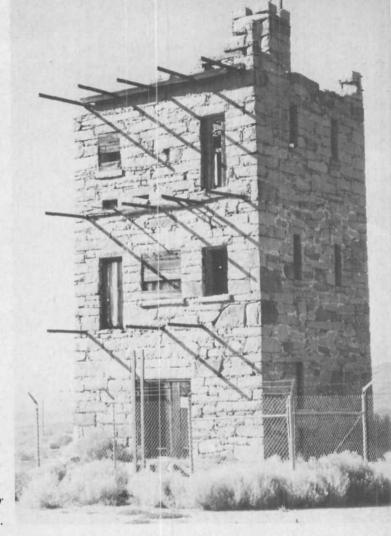
Continued on Page 34





Nevada Nostalgia

by Al Waterman



Stokes Castle near Austin, Nevada.

Theresting points of historic importance in the early opening and development of the Old West may be visited by travelers crossing the mountains and valleys of the west central Nevada desert on scenic U. S. Higway 50. The course follows closely the old Central Overland Stage road and sections of the famous Pony Express trail of 1860-61.

The vast expanse of this lonely and still sparsely populated region appears much the same today as when the pioneers first viewed it from their wagons over 100 years ago. At best, it then was regarded as a highly dangerous path through hostile Indian country.

Demonstrating the practicability of this central route as the most advantageous course to California, taking the shortest and best way across Nevada, the famous old freighting firm of Russell. Majors and Waddell, in a bold and daring gamble, established the Pony Express fast mail service. Deliveries were made in ten days, and often less, by the flying pony between St. Joseph, Missouri and San

Francisco, a distance in excess of 1900 miles.

Over 400 selected horses and about 120 experienced riders were engaged in crossing the country each way, every ten days, in relays. Each rider covered 75 to 100 miles, changing mounts about every 15 miles at crude stations erected along the route, manned by four or five men. The stark remains of some of these old stations are marked, and still visible along Highway 50, west of Austin, Nevada.

The important and interesting old mining town of Eureka is located on this highway about 70 miles east of Austin, and about midway between Austin and Ely. Nevada. Motel and restaurant facilities are located here amid attractive mountain scenery and interesting landmarks of the early West. Maps with numbered points of interest in the town are available at the restaurants and stores.

Responsible for this old settlement were the booted and bewhiskered prospectors who prowled the hills and gulches of the area in 1864, locating rich lead-silver outcroppings. Lack of the necessary technique in separating the two metals, however, delayed production for a few years, until new smelters were set up.

By 1869 production was well under way and population of the old camp increased rapidly, eventually numbering around 8,000. As new mines in the vicinity opened, additional furnaces were added, finally totaling 16. At this point the town was staggered by an air pollution problem threatening lethal consequences to workers and the citizenry in general.

Huge clouds of soot, smoke and lead fumes billowing from the smelter stacks engulfed the town, and Eureka probably became one of the earliest western settlements to experience such a nuisance. The problem was solved by laying elongated stacks in trenches, up the side of the mountain, to the rear of the smelters, where the fumes were carried away from town. The "V" trenches are visible today, above the slag piles at the south end of Main Street.

October, 1973

Huge quantities of charcoal were essential to the operation of the smelters, produced by charcoal burners at scattered locations in the area at a price of 30 cents a bushel. This was arbitrarily reduced to 27 cents by the mines, creating serious trouble and resulting in what was known as the Fish Creek war.

Forcibly preventing any deliveries of charcoal to the mines, the Charcoal Burners' Association seized the town, threatening bodily harm to the mine managers, and the state militia was called in to restore order. A sheriff's posse attempting to arrest some men at the Fish Creek charcoal camp, about 25 miles from Eureka. ran into armed resistance and five charcoal burners were killed. The chacoal price later was reduced to 22 cents.

By the end of 1879, Eureka had produced something in excess of \$20,000,000 of lead, silver and some gold. The town had become a crossroads and hub for passenger and freight traffic in all directions and a railroad connected Eureka with the town of Palisade to the north.

As the seat of Eureka County, and at the time the second largest town in Nevada, a courthouse befitting this important mountain metropolis was deemed necessary, and one was erected in 1879 at a cost of \$53,000. Located on Main Street, it still is in use.

Directly across the street in the same year, a labor union hall was started, but financial difficulties forced the sale to other interests. As a cultural offset to the burgeoning saloon business, it was finished as an opera house, complete with the architectural embellishments in vogue in that era. It later became a movie theatre. but at present is not in use.

Located at the far south end of town. and denoted by a numbered marker, is the solid old Tannehill log cabin, said to be the first permanent residence built in Eureka. It was built to last, and did.

At the rear of the courthouse, and diagonally across the street, is the old building of the *Sentinel*, and important and influential newspaper in those days. Interesting handbills and posters of the 1880s cover the inside walls pertaining to events of the times.

Three fires swept Eureka in 1872, 1878 and 1880 and a cloud burst in 1874, causing heavy damage and some loss of life. Several fire companies were formed and the old Nob Hill firehouse still stands, denoted by a marker. Many years have elapsed since the old horsecart saw action.

The many graveyards in Eureka arc located on a slope to the west, at the south end of town. Plots in some of these enclosed by ancient iron and wooden fences, are in somewhat of a delapidated condition, relatives and friends having long since departed the region.

Many millions in silver and gold were produced in the Eureka district in addition to tremendous quantities of lead, running into the hundreds of thousands of tons. Mining companies still retain property interests in the area and are said to be awaiting more favorable economic conditions for future developments.

Eureka today, by no means a ghost town, provides excellent educational facilities with a fine modern school, ably staffed. Cattle ranching is carried on in the vicinity along with some other agricultural activity. It is a most interesting and friendly old town to visit.

About 70 miles west of Eureka, U. S. 50 reaches the old mining town of Austin, Nevada, seat of Lander County. Discov-



FISH! FISH! FISH!

TROUT, BASS AND CATFISH Get your share at Hall's Crossing

HALLS'S CROSSING MARINA OFFERS: Gas and oil, live bait and lures, fishing gear, boat repair facilities, cold beer, ICE, groceries, slips and buoys for rent. Overnight accommodations that sleep two to eight persons. Write or call for reservations. At the general store: fresh milk, eggs, butter, frozen meat, cold cuts and canned items for camping or picnicking. Take a boat trip to Rainbow Bridge in one day. 2, 3 and 4-day tours to various parts of the lake, camping and sleeping under the stars. Ferry service for travelers with light vehicles. All types of pleasure craft for rent, from 14-ft. to houseboats. Airstrip is 4000 feet with tiedown facilities available.

HALL'S CROSSING MARINA

Write Lake Powell Ferry Service, Blanding Utah or call Moab Mobile Operator, ask for Unit 56





ery of a rich silver ledge in Pony Canyon, about a mile west of Austin, sparked a rush to the Reese River country in 1862. and hundreds of claims were staked in the area. By late 1863, population numbered around 2500, and in succeeding years increased to about 8,000.

Using Austin as a base for supplies, prospectors spread out in all directions establishing numerous other mining camps in the Reese River area. The productive years of most of these were of shorter duration than Austin which still is the seat of Lander County and a supply center for cattle ranches. Mine dumps and prospect holes are visible on the hillsides around the town.

Many of the old buildings still are in use along U.S. 50 which passes through town. An architectural oddity known as Stokes Castle is located on a dirt road to the left, off U.S. 50 at the west end of town, about a mile from the highway. Built of stone blocks from local quarries, it is said to be a duplicate of a castle in Rome.

The two lower rows of supports protruding from the front of the castle originally held porches, and the top row a sun shade. The lower floor contained a kitchen and dining room, the second floor a living room, and the third floor had two bedrooms. The structure was built for Anson P. Stokes in 1897 and served as his home for several years. He operated

extensive mining properties in the area and built the 92-mile Nevada Central Railroad from Battle Mountain to Austin.

Floors and stairways in the old building were removed to prevent injury to sightseers in former years, and at present the structure is enclosed by a high wire fence for protection from damage by vandals. From the location of the castle a magnificent view of some 60 miles may be enjoyed. Immediately below and near the castle is an old mine hoist and shaft.

Toward the east end of Main Street stands the old stone Gridley store, at one time operated by Reuel G. Gridley, and made famous by his loss of an election bet. As a penalty, Gridley was required to tote a 50-pound sack of flour the entire length of Main Street to the great amusement of the townspeople.

Gridley returned the sack to the center of town where it was auctioned off for the benefit of the Sanitary Fund to relieve distress and suffering caused by the Civil War, in a patriotic endeavor. The sack was auctioned several times. each buyer returning it to be sold again and again. Other mining settlements, hearing of the event and entering into the spirit of the occasion, demanded that the sack be brought to their camps for similar treatment.

Gridley traveled to many mining camps of the west with his sack of flour, terminating his extensive mileage at the St. The old Gridley Store. Austin, Nevada.

Louis World's Fair where it was auctioned for the last time, having raised a total amount of about \$275,000 in an impressive performance.

Brochures may be obtained at the Austin Chamber of Commerce listing various points of interest in the old town. Motels, restaurants and other services are available here, offering a comfortable stopover point for the traveler interested in the early history of Nevada.





Organ Pipe

by Jack Pepper

Below: Organ Pipe cactus along the Ajo Drive with other types of desert vegetation which are identified along the route. Right: A palo-verde tree completely surrounds a saguaro. Th palo-verde is sometimes called a "nurse" tree as its overbanging branches give a protective shade to young saguaros. Opposite page: The San Jose church at Pisinimo.





A LTHOUGH NEITHER as large in area nor as well known as many other similar Federal preserves in the West, Organ Pipe Cactus National Monument contains an unusual and vast variety of animals and plants which can easily be seen via two scenic drives through its beautiful landscape.

Located in central Arizona on the Mexican border, the monument is also a central and convenient area for interesting trips to the adjacent Papago Indian Reservation, into the quaint villages and fishing waters of Mexico and to the cultural and tourist attractions of nearby



Phoenix and Tucson.

For back-country explorers, the area east of the monument abounds in old ghost towns and historic sites, and offers miles of rugged country for rockhounds, bottle collectors and metal detector users.

Named for a species of cactus rare in the United States, the 516 square miles of the monument proper were set aside in 1937 to protect and preserve desert plants, animals and natural features in that segment of the Sonoran Desert land-scape that stretches from northwestern New Mexico to southeastern California.

The area contains stark mountains,

sweeping outwash plains, rocky canyons, creosotebush flats and dry washes that typify the beautiful but harsh land. It is the meeting place of plant-defined extensions of three deserts: the central gulf coast phase of the Sonoran Desert, the California "microphyll" (which means small leaf plants) desert from the west, and the upland Arizona succulent desert from the east.

第一个

Organ Pipe Cactus National Monument is reached by taking paved Arizona State 85 south from U.S. Interstate 8 at Gila Bend, just south of Phoenix. It is approximately 80 miles from Gila Bend to the monument.

Forty miles south of Gila Bend is the picturesque town of Ajo (pronounced Ah-hoe). Here is located one of the largest open pit copper mines in the world. It is but a short drive to the observation point where you can look down into the giant pit and watch the operations. Spaniards mined copper here in the early 1700s. Then activity ceased until reactivation in 1854.

Just south of Ajo is the little village of Why. Don't ask me "why" Why was named Why. I asked the local residents and they all gave different versions. This is the only gasoline supply until the Mexican border so it is wise to "fill 'er up."

Seventeen miles south of the monument entrance is the visitor center. I was impressed with the architecture of the buildings which blend into the landscape. It is here you register and obtain your site number for overnight accommodations at the nearby campgrounds which are located on a hill overlooking the valley below with the mountains in the background. I photographed one of the most spectacular sunsets I have ever seen by just sitting in a chair alongside my trailer at the campgrounds.

The beautiful campgrounds will accommodate campers, travel trailers and tents. Each site has a charcoal brick stove and a table. There are water faucets and a building with toilets and showers, but no electrical hookups. (For those who need more sophisticated facilities, there are private parks in Ajo and Why.)

There are no stores or services within the monument. However, such services are available at Why or at Lukeville, just this side of the Mexican border, five miles from the visitor center.

Even if you are not going to camp overnight, be sure and stop at the visitor center to see the beautiful large photographs and exhibits which explain the desert and the type of life it supports. Park rangers will help you plan your trips.

October 1973

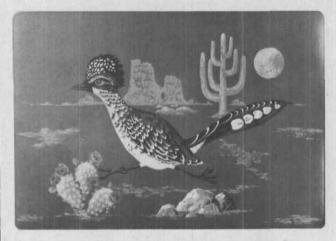
Two graded scenic loop drives, which start at the visitor center, lead through the more remote and interesting sections of the monument. Detailed brochures on each drive are available free.

The "Ajo Mountain Drive" is a 21-

mile graded one-way dirt road. It winds and dips as did the desert trails of yesterday, but a modern passenger car can easily be driven around the loop. As the rangers say, "Drive slowly—stop frequently—and see the desert."

Roadrunner Place Mats

Our roadrunner shows his true colors on Hedwin's wipe-clean, plastic place mat with a unique non-skid foam backing.



Take six of these lovable, desert birds to your heart and home.

Either oblong or oval: Specify which.

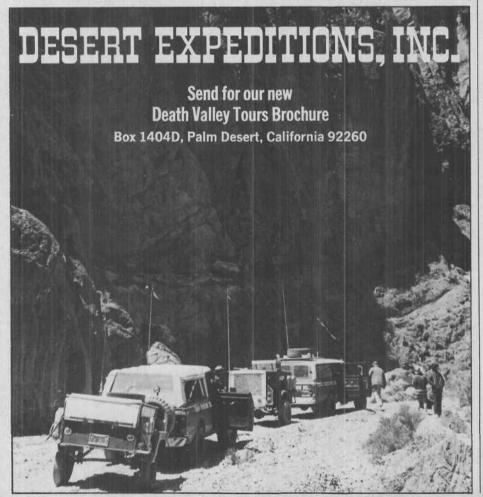
The Set of Six

\$750

Plus 50c shipping California residents add 6 % tax.

SEND ORDERS TO: BOB GULLICKSON DESIGNS

8473 MELROSE PLACE, LOS ANGELES, CALIFORNIA 90069





The Ajo Drive has some of the finest scenery in the monument and follows a route chosen to blend with the landscape without altering its primitive nature. It passes through beautiful and fascinating displays of Sonoran Desert vegetation and overlooks outstanding panoramas of desert mountains and plains. Average driving time is two hours.

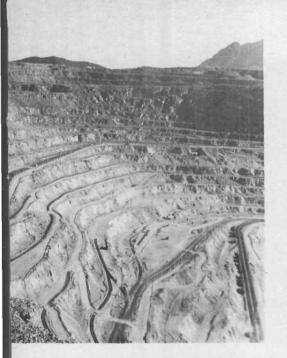
The "Puerto Blanco Drive" parallels historic routes of early desert travelers as it circles the colorful Puerto Blanco Mountains and skirts the northern border of Mexico. Short side trips lead to foot trails. Allow at least a half-day for the 51-mile loop trip.

Both drives have four picnic sites with ramadas located in scenic areas. There is no water so be sure and take an ample supply. Also stay on the designated roads as car tracks on the desert floor will last for years. Both for photographs and seeing wildlife, the best time for either trip is early morning or late afternoon.

The monument also has excellent hiking trails, including the one-mile Desert View Nature Trail, plus longer ones for more seasoned hikers.

Although the monument is open yearround, the least pleasant months are June, July and August when it is quite warm. Winter days are usually sunny and warm, although sub-freezing nighttime temperatures and chilly winds occur during December and January. Temperatures are ideal the other months of the year.

While staying at the monument you should take time to go "south of the bor-



Open pit copper mine at Ajo.

der" and visit the little village of Sonoyta. You can either park your car on the United States side, or drive. No permits are needed to visit Sonoyta.

Sixty-two miles south of the border on a paved road is the popular sport fishing community of Puerto Penasco (Rocky Point). If you plan to visit this community, either for just the day or overnight, be sure to get both a free tourist permit and car entry permit at Sonoyta. Although this does not take long, your birth certificate or other type of identification, and car registration are needed. It is also advisable to get Mexican automobile insurance at Lukeville, as your regular insurance is not valid in Mexico.

A one-day loop trip through the Papago Indian Reservation begins and ends at Why. Take Arizona State 86 to Sells and then return on the southern gravel road. From Sells it is only about 40 miles to Tucson. Tucson and its environs, including famous Tubac, is one of Arizona's most interesting and historic areas.

The Papago (papa-go) Reservation has 2,700,000 acres in which live 7,500 Indians whose craftsmen are famous for their colorful and fine-woven baskets. An excellent collection of these baskets (some for sale) can be found at the Quijotoa Trading Post on State 86, 38 miles east of Why. There are other trading posts along the loop trip. Half way between Sells and Why on the southern part of your loop trip is the Indian village of Pisinimo with its Catholic church and small mission.

Called San Jose, the church is one of the most unconventional Catholic edifices in the West. When building and decorating the church, Father Camillus Cavagnaro, OFM, allowed the Papagos full expression. The designs are a mixture of Papago, Navajo and Mexican cultures. One of the most interesting scenes is a Mexican painting on velvet of a suffering Christ.

The church is open to the public, but remember that you are a visitor on an Indian reservation, so show proper respect. (For an excellent article on the Papago Reservation and church, see "I'll Take the Low Road" by the late Bernice Johnston in the May '69 issue of Desert.)

After this interesting loop trip you will return to your campsite at the Organ Pipe National Monument in time to get out your camp chairs and relax while you watch the sun make a kaleidoscope of colors as it sinks behind the mountains of this beautiful and historic land.



DOWSING! AURAMETERS! PENDULUMS! L-RODS DIP NEEDLE! Y-RODS!



Institute of Entelechy

Winter International Convention

SATURDAY, NOVEMBER 10th THRU SUNDAY, NOVEMBER 25th BIG SUR, CALIFORNIA

CAMPING FACILITIES AVAILABLE; MOTEL ROOM RESERVATIONS—

FIRST COME, FIRST SERVED

GEOPSYCHICS

LECTURES — DEMONSTRATIONS —CLASSES — WORKSHOPS

Revealing secrets of dowsing closely guarded by locators. At all levels. Local and remote (map locating) with and without a variety of instruments. Be developing and using higher sensor perception techniques used in locating underground water, oil, ore, treasure, missing persons, animals and lost objects.

Charles L. Sanders, Instructor Bill Cox, Raymond C. Willey, Guest Speakers



Charles L. Sanders, founded the Institute of Entelechy. He is recognized for his work with Higher Sensory Powers (HSP).

WRITE FOR FREE INFORMATION AND REGISTRATION FORM. REGISTRATION LIMITED. BOX 31722, AURORA, COLORADO 80010



New Mexico's



Puye

ONCE THE place was a city—a sprawling citadel seated high atop a great desert mesa where nearly 2000 ancient people lived and worked in harmony. It is called Puye Cliffs, and is located some 50 miles north of Santa Fe, New Mexico.

The city was in two main parts. The largest section atop the mesa boasted four massive community houses surrounding a cobblestone courtyard. Something on the

Above: The Puye "hole houses". Left: Puye hosts a feast each August 12, featuring traditional dances.

Desert Magazine

order of a college dormitory, each of these great dwellings contained nearly 200 rooms.

Below, and to the south of this "sky city," and built into the very face of a vertical cliff. lay the second half of the metropolis. Hand-cut caves, the entrances to which were protected from the weather by log huts, ran the length of a 2000-footlong belt of grayish-yellow "tuft" rock. The city's architects hung these "hole houses" on the face of the tuft as easily as a wasp might hang his nest from a rafter.

A few hundred yards away from the upper section of the city, lay a giant reservoir, 120 feet long and 60 feet wide. It quenched the thirst of people and land alike. Replenished daily by a two-milelong irrigation canal, the reservoir, even in the dead heat of summer, supplied moisture to the corn and squash fields which dotted the valley floor below.

The craftsmen who lived on the mesa were talented artisans who created delicate stone jewelry and beautifully painted pots and bowls for use both in the home and for units of trade with other tribes. The city's masons, artists in their own right, carved building blocks from stone and adobe to be used in the walls of the ancient houses. The blocks were joined together with such precision that centuries later, long after the bones of the men who made them had turned to dust, some of the walls were still standing upright and strong.

Cliffs

by Buddy Mays

Today, 400 years after the last of the inhabitants mysteriously disappeared, much of the city is still visible on its desert mesa. Puye Cliffs, which, in the Indian tongue, Tewa, means the "Place where cotton-tail rabbits gather," and its ruins are located on State 30, north of Santa Fe.

No one really knows what happened to the people who once lived in Puye. Sometime around 1600 A.D., during the "Pueblo Revolt," when most of the Pueblo Indians of New Mexico combined their forces and drove a multitude of Spanish conquerors from the land, the residents



Margarito Tafoya, caretaker of Puye.

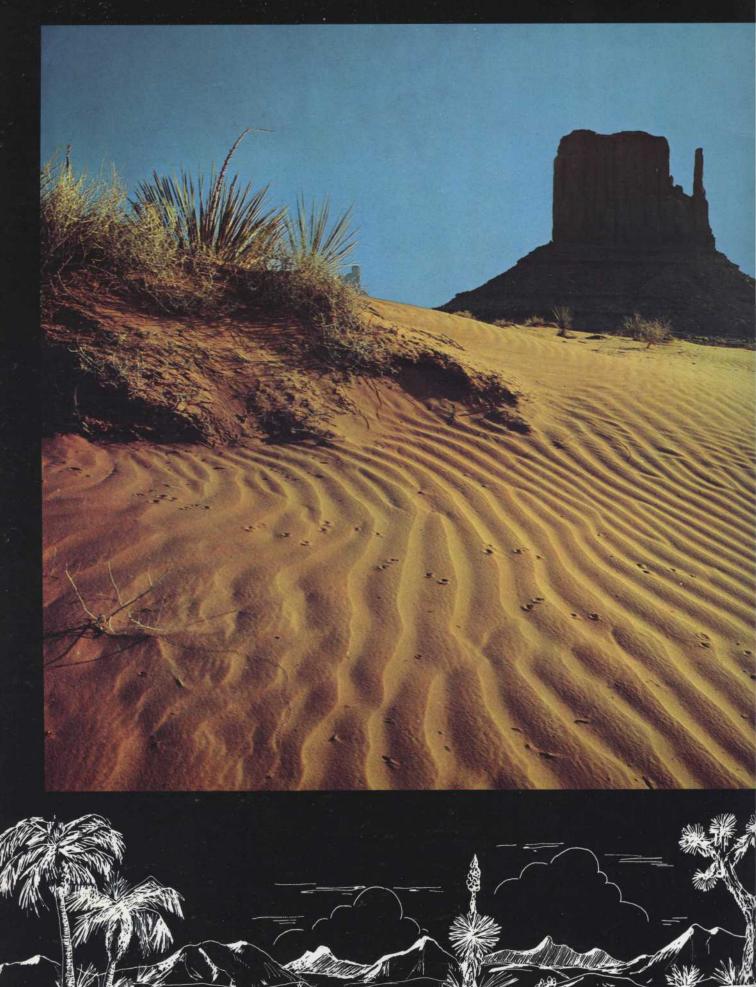
of Puye simply disappeared, leaving behind no record of their departure or of their destination.

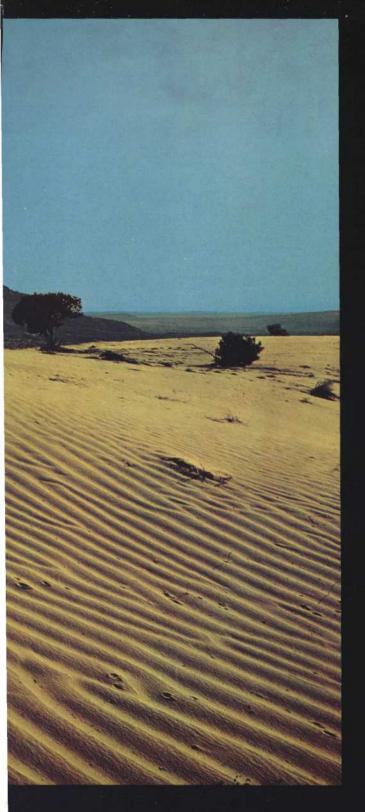
Scientists are baffled. Some believe that Puye was devastated by an unknown disease brought into the city by Spanish soldiers. A believable story, but those same archeologists can't explain the whereabouts of 2000 or so skeletons which should have been in the ruins and weren't.

The residents of Santa Clara Pueblo, a small Indian village 15 miles east of the

ruins, have their own theories. They believe that the ancient people simply packed up, lock, stock, and water pot, and moved closer to the Rio Grande River in search of more fertile farmland. According to Santa Clara Elders, the search ended when the ancients settled on the site that is now Santa Clara Pueblo, consequently becoming the founders of the village. Most scientists agree with this theory, adding that it is a good possibility that the streams

Continued on Page 40





My Desept

by Robert Hiltunen

My desert is a land of long shadows; of box canyons filled with silence; of soul-restoring peace and solitude. It is a land of dreams; a never-never land of mystery. Here are the haunts of the outlaw and the prospector, the playground of the smog-weary city dweller with his sand-buggies and doodlebugs. It is a land of contradictions; of many moods. What man can truly say he knows the desert?

To really know the desert, you must attune yourself with nature; sense its every mood. You must feel the wind in your face, smell the spine-tingling aroma of sage and yucca, see the first bloom of the cacti. You must become as one with the creatures of the wild; know the habits of the furry ground squirrel, the lowly sidewinder, kit fox and fleet coyote, and the stately bighorn sheep that rule the rocky heights. These are God's creatures in their own element—let not man come as an intruder.

Monument Valley by Ed Cooper





To know the desert is to love it. It is a love affair of mutual acceptance and understanding. Randall Henderson put it into words when he said, "To those who come as friends, the desert offers friendship." It is a friendship born of a thousand years of peaceful coexistence between the desert dweller and his environment.

The strangers who come to our desert to pollute and despoil our surroundings are the arch-criminals of our age. The empty cans and torn candy wrappers give mute testimony to man's inhumanity towards his environment.

The one-blanket prospector knew the desert

as well as any man may. His compass was a burro's tail—what matter if it pointed north or south or whichever direction. He was home, and where else would a man rather be? If he struck it rich he spent it and went on searching. For it wasn't the gold itself that mattered as much as the finding. It was a way of life and who could ask for one better?

My desert is not always kind. It is sometimes a land of searing heat; of blinding wind-swept dust and sand. It is a land of thirst that drives men mad. It has known violence and sudden death in many forms, from the bushwhacker's bullet to the feathered arrow and Indian lance. Not to be outdone by



man, Nature, too, exacted her toll, as witness the luckless prospector whose thirst-parched lips, now long since grown cold, still seem to babble, Gold! Gold!

The early pioneers knew my desert in a way I never shall. With their covered wagons they crossed its endless reaches from the burning sands of Death Valley to Donner Pass and beyond. Gold in California! Lush meadows beyond the Oregon Trail! The word spread like wildfire. It took no urging—by the tens of thousands they came. The bleached bones and unmarked graves gave testimony to the hardships encountered along the way. Some made it to the promised land and the desert claimed the rest.

This land is peaceful now, but like a sleeping giant it will never be tamed. The burning, summer sun still takes its toll of unwary travelers and stranded motorists. To survive here one must accept its limitations and strive for acceptance from Nature.

This is the home of the miner. His was the reason for being; he led the way and the towns sprang up behind him. While the Comstock poured forth its wealth, the single-jack miner eked out a solitary existence amid his drifts and tunnels. The thousands of abandoned "gopher holes," scattered throughout this region, attest to his shattered hopes and broken dreams. Some drifted on to greener pastures, while the others stayed on to become a part of the desert they loved.

There is romance to be found here in my desert. One can only conjecture as to what tales the four walls of a miner's cabin could tell. The history of the Southwest was written in its boom camps. Visit one of the countless ghost towns, scattered through the Great Plains country, and take a journey into the past. The ghosts of yesteryear peer from the doorways and alleys as you stride past.

Listen intently and perhaps you may hear raucous laughter of the painted ladies. mingled with the clink of poker chips and the tinkle of glasses. The wooden sidewalks resound with the tread of countless, roughshod feet,



and gunfighters still take their fateful walks down the dusty street as they did so long ago. Nothing has really changed. It is all there as it was yesterday—if one will but look beneath the surface.

Here is a land where the blue skies are endless and crowned with a landscape of pastel colors that no artist's canvas can hope to duplicate. The air is crystal clear and the stars at night twinkle like a million sparkling diamonds, so close you can almost touch them.

Here are rocky promontories awaiting the agile climber; mysterious canyons begging to be explored. Here, too, are legends of lost gold and buried treasure that excite the imagination. This is rockhound country. Who knows, maybe the next shovelful of dirt will uncover a rich find in turquoise or fire agate. So bring your picks and metal locators. Perhaps you, too, can be another Pegleg Smith.

At the very least you will discover the priceless feeling of freedom and well-being that this land, my desert, has to offer.





THE GREAT MOJAVE'S PROVIDENCE by Mary Frances Strong

photos by Jerry Strong

Recreational Bonanza!

Above: 4-WD or trailbikes are needed to cover the last mile down Woods Wash to the petroglyph site. The loose sand gave Roy Purdee, left, and Jerry Strong a real workout. Opposite page: Beyond the headframe of the Bonanza King Mine, lie the ruins of the old town of Providence (circa 1870-87). Tuff from the bill in center of photo was quarried and used as a building stone. Past the standing ruins, downslope for some distance, will be found the stone rubble from dozens of cabins. Population rose to 500 at one time.

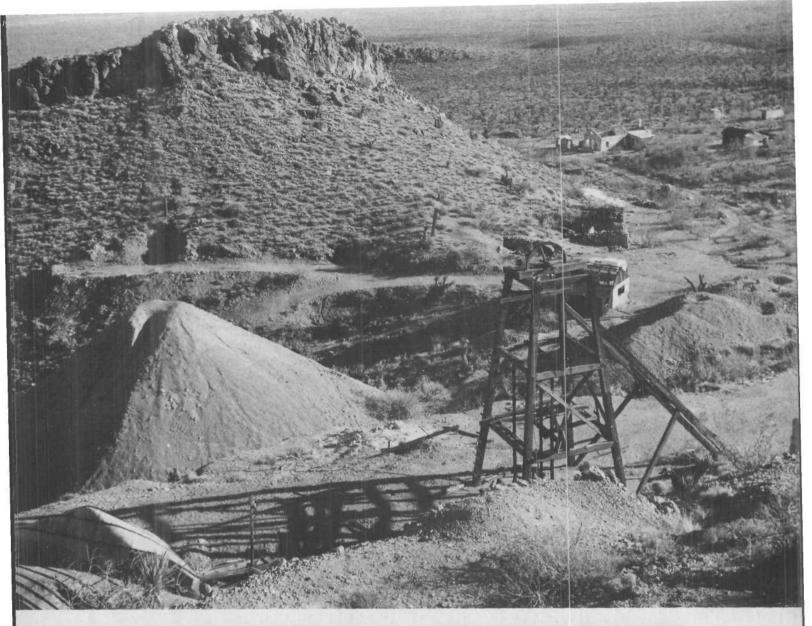
THE FIRST rays of the morning sun skipped across the craggy, castlelike peaks of the Providence Mountains as we left the paved road and headed into the heart of the Great Mojave Desert. Ahead, rising like a gigantic citadel on a vast sea of alluvium, this lofty range is the stalwart guardian of a region steeped in history, rich in artifacts and minerals, blessed with scenic beauty and offering a recreation area unparalled in California's High Desert Country. For us, it was a return trip to a region we have come to know and love.

Our long and pleasant association with the Providence Mountain Region began two decades ago. In the beginning, a visit every few years seemed to suffice. As our

friendship grew, so did the frequency of our trips. Now, we usually "stop by" for a few days during our annual fall safari. Interest in the region hasn't waned as we always find new canyons and sites to explore, as well as favorite locations to re-

There have been many changes in the Region over the years. Originally, numerous roads were posted and gated by ranchers who didn't take too kindly to the growing numbers of desert enthusiasts. This has all changed and few "Keep Out" and "Private" signs will be seen. The Bureau of Land Management has opened Wildhorse Canyon and improved the road to provide access to a very scenic area. It has also developed two fine camp-

Desert Magazine



MOUNTAIN REGION

grounds - Hole-In-The-Wall and Mid meval seas. Hills.

The Providence Region, which encompasses approximately 1700 square miles, cannot be fully explored in several weeks, much less a weekend. However, from Hole-In-The-Wall Recreation Site, visitors may sample the many delights it has to offer even when time is somewhat limited.

will notice the Providence Mountains are a very steep, narrow range separating the region into "east and west" sides. A bul- eight-thousand feet, the density and diwark of high peaks at their southern ex- versity of the flora in this desert area are tremity resembles a giant mountain for- quite unexpected. Forests of fragrant pintress. Exposed in the range are tremendous you pine and juniper clad the steep deposits of limestone that formed in pri- shoulders of the range. Mountain mahog-

Flat-topped mesas clearly reveal the record of numerous lava flows. Outcrops of rhyolite and beds of ash indicate the magnitude of the volcanism which poured forth in fiery tongues and fierce eruptions. These geologic forces and nature's erosive powers have combined to produce wide contrasts in the topography and the resultant scenic beauty to be found Traveling north from Interstate 40, you throughout the entire Providence Mountain Region.

With elevations ranging from three to

any, ceonothus, buckwheat and Joshua trees add color and interest.

At lower elevations, along the base of the range, are nature's "prickly gardens" filled with pencil, beavertail, hedgehog, barrel, fish hook and other members of the cacti family. Fine stands of Yucca schidigera dominate the more or less flat valley areas. Wildflowers abound everywhere when there has been ample winter moisture. Spring of 1973 was such a year and the Providence Mountain Region displayed a gigantic wildflower extravaganza.

Our base camp was made at Hole-In-The-Wall since the purpose of this trip was to map four areas we felt would fulfill the varied interests of Desert's read-

October, 1973



One of the large veins of pistachiogreen opal at Lobo Point. Many chunks of good color and pattern can be found.

ers. We parked the trailer in one of the units which provided a table with sun shelter, grill, water and nearby sanitary facilities. There are 10 such units and a large, flat area in the center of the campground will accommodate groups desiring to camp together.

Hole-In-The-Wall is an intriguing geologic formation. It resembles a giant cauldron formed by magma pushing toward the earth's crust which experienced rapid cooling plus resultant shrinking and cracking before reaching the surface. Throughout eons of time, the erosive forces of wind and water have stripped away the lesser resistant rock and exposed a weird, almost unearthly landscape.

A viewpoint has been built inside "the hole" and gives visitors the feeling of having walked through a slit into the inner recesses of the cauldron. Steep, perpendicular sides drop away through a narrow crevasse to Wild Horse Canyon on the west. The trail and viewpoint are quite safe but further exploration of Hole-In-The-Wall is not for neophyte climbers.

Northern Loop Trip

A loop trip north will introduce visitors to Wild Horse Canyon and several historical sites. A good, graded road leads along the base of lofty peaks through mini-forests of pinyon pine and juniper. Watch for Lobo Point on the east, 3.2 miles from Black Canyon Road. It is a sharp, distinctive peak of fluted white volcanic rock capped with a dark lava flow which stands out vividly from the landscape. It is also the locale for a fine rock collecting area to be described later in this article.

There are many side roads in Wild Horse Canyon to lure the adventurous. We explored Macedonia Canyon on trailbikes, enjoying the exhilarating climb through a fragrant stand of pines. Old mine dumps were examined and several side trails sampled—one eventually leads through a pass in the range and joins the Kelso-Cima Road eight miles north of Kelso. These routes are for four-wheeldrive and trailbikes.

Wild Horse Canyon continues north over a gradual 5500-foot summit, passes Mid Hills Campground (you might want to look it over), then drops down to Cedar Canyon through a jungle of giant granite outcrops.

Cedar Canyon Road follows a route through the mountains that played a major role in the history of the Great Mojave Desert. Originally, it was an ancient Indian trail from the Colorado River to the Southern California coast. Most historians agree it was the route used by Padre Garces on his epic journey in 1776, the first white man to cross the Mojave Desert.

Traders with pack trains and numerous prospectors used the route frequently in the early 1800s. By the 1850s, wagon trains of hardy emigrants, bound for Southern California's land of "milk and honey," began to journey along what became the Government Road. Such a trip was fraught with danger, as well as discomfort. Sporadic Indian raids were common and in 1857, when a wagon train was massacred, the Army ordered military posts be established along the road from the Colorado River (Fort Mojave) to a site on the Mojave River (Camp Cady near Dagget).

Camp Rock Springs in the Providence Region was one of the military posts. Abandoned since 1868, it is a fascinating place to visit. Turn right on Cedar Canyon Road and travel east. Check mileage at Black Canyon Road. 5.2 miles farther east, turn right onto dirt tracks in a major wash. They will lead around a hill to the site of Camp Rock Springs. Remnants of several dugouts, a cave "store house" and a long, stone fortress will be seen on the hillside. Rock Springs lies a short distance west in a canyon where a



Woods Wash petroglyphs cover a wide area and have many unusual figures. These are some of the more common.

Derest Manufacture

large tinaja provides water for the animal life in the area.

A number of petroglyphs, unfortunately there are some which appear to be of recent origin, will be noted on the rocks above the campsite. Rock Springs was an important stop along the old Indian trail.

Camp Rock Springs was manned by one officer and a patrol of about 20 enlisted men. One of the more polite descriptions of duty here was "hell." The Secretary of War's report in 1867 described it as "on the desert, a very disagreeable place for troops."

It must have been this and more with the crudest of facilities—none of a very permanent nature. It was hot in summer and bitterly cold in winter. Supplies inadequate and water scarce, since the spring could not supply their needs. Subsequently, two wells were drilled a mile west at Government Holes to supply the camp and travelers.

Duty consisted of keeping Fort Mojave "informed of any hostile movements in the area and to keep the road open and clear for travel in their vicinity." Two patrols to Fort Mojave were made monthly to fulfill these duty obligations.

Due to the remoteness of the camp and the high cost of feed, orders came from Washington to replace the cavalry with foot soldiers, ust how soldiers on foot would "protect travelers" from Indians and highway men on horses didn't seem to concern the top brass as much as the price of feed. This decision was bitterly fought and a compromise by Washington left a few mules and horses for use when the patrol provided an escort for mail wagons.

Camp Rock Springs was active from 1860 to 1868 and even had a postoffice for a short period of time. During the last few years it served as a secondary supply point — with provisions coming from San Pedro Depot some 250 miles away.

Evidently, due to the increase in traffic along the Government Road, the wells couldn't provide the water needed for a resting and supply point. In 1867, orders were issued stating "Camp Rock Springs is to be broken up due to lack of water." The patrol at Camp Marl Springs (20 miles west) assumed the duties of "watching over the area."

From the old Camp, return to Cedar October, 1973

Lobo Point stands out prominently and acts as a landmark for a fine rock collecting area. At its base are tremendous veins of opal and jasp-agate.

Canyon Road and retrace your route for .4 of a mile to a dirt road on the left. Follow it a short distance to the crest of a hill (.1 mile). You are now on a section of the original route of the Government Road where a battered sign states "Cima 16, Lanfair 11." Look toward the east and you will see a rock house said to have been built from stones used at Camp Rock Springs. This is private property. Do not trespass. Continue west along the old road and you will pass Government Holes (windmill and watering tank), then rejoin Cedar Canyon Road.

Take Black Canyon Road south through Picturesque Round Valley where huge granite boulders resemble a myriad of imaginary figures. The road then climbs a pass through the narrows of Black Canyon before spilling into Gold Valley and reaching Hole-In-The-Wall.

Four-Wheelers

Four-Wheelers will find the Providence Mountain Region offers scenic back-country exploring with many trails leading into colorful canyons on the eastern side of the range. Directly east of Hole-In-The-Wall, the Woods Mountains have four-wheel-drive trails down several sandy, main washes and into canyons intriguingly named "Rustlers, Burro, Grass and Secret." This is "Robber's Roost" country where bandidos reportedly hid after robbing wagons and travelers along the Government Road.

Wood Mountain Petroglyphs

Woods Wash, a sizable drainage channel, cuts through the range from north to south and gives access to one of the finest petroglyph sites on the Mojave Desert. The glyphs are numerous and unusual in their detail and variety of subjects—spider, lizard, chia and geometric designs to name but a few. One exceptionally fine glyph we named "The Ballerina."

Pickups can drive to within one mile of the site. However, the last mile is through deep, loose sand and requires four-wheeldrive. We made the trip on trailbikes, accompanied by Roy Purdee of Seattle, Washington, a fellow camper at Hole-In-The-Wall. It was a fun ride but the bikes, and riders, found it mighty tough going in the sand.



Glyphs will be seen on the rocks immediately along the wash as indicated on the map. However, the largest number lie about one-fourth mile east. Walk toward the dark outcrops on the hill and you will soon see them. They are found over a wide area.

Petroglyphs are protected under the Antiquities Law and may not be removed or defaced. The B.L.M. wants visitors on Natural Resources Land to enjoy seeing these interesting sites but disregard for the law will not be tolerated. Keep in mind while there may only be a small number of Desert Rangers at present, they can still do a very good job of patrolling via helicopters.

Lobo Point

Rockhounds will find good collecting for green opal and colorful jasp-agate at Lobo Point. It is an easy-to-reach locale, safe for all cars but not advisable for trailers. As the crow flies, the collecting area is only a mile and a half from the campground. However, since man doesn't fly, it is almost four miles due to going 'round the mountain.

Just over a mile north of Hole-In-The Wall (see map for detailed mileages) turn left onto dirt tracks. They climb an alluvial slope, then turn south. Lobo Point, a beautiful, fluted exposure of white volcanic rock crested with dark lava, easily dominates the landscape as it towers 500 feet into the sky. At its base, an oper area among the pinyon pines will provide a good parking area.

Old tracks will be seen leading towards the base. They cross sizeable deposits of opal and jasp-agate. At times in the past, the deposit has been under claim and the remnants of a dugout and makeshift loading ramp remain. A short distance southeast are the ruins of a shack. Hike west above the tracks and you will come to tremendous veins of common opal. We dug out several nicely patterned pieces of good color.

Harrison Doyle, of Vista, California, wrote to me about this area several years ago. He felt sure rockhounds would enjoy one of his favorite locales. His father-inlaw, J. M. Hudson, worked the Gold Valley Mine in the 1920s and '30s. During this same period, Harrison held two claims on Lobo Point. He also told me he found some "precious opal" beneath the white cliffs there.

I talked with Tommy Stewart, B.L.M. Providence Mountains Area Manager, in July '73 regarding rock collecting in this locale. "Rockhounds are welcome to collect at Lobo Point provided they take only the reasonable amount of agate allowed under B.L.M. regulations," he replied to my query regarding status. "We do not permit any commercial collecting or power tools. The material is for hobby use only and not to be sold." (This would include "side-pocket" dealers.)

With a plan for the "use of the desert" to be finalized in the fall of 1973, all collectors must obey the limit on collecting cutting material, minerals and wood. If we do not, our collecting locales will be closed. We must all realize this vast, open land-where we have roamed and collected at will-is going to be managed. The plan includes open, restricted and closed areas. We will lose some of our favorite locales and we must abide by the rules, if we are to retain the others.

Providence

Ghost town buffs should enjoy a trip to this old mining camp where a silver strike was made in 1870. The Bonanza King Mine was developed and a sizeable town came into existence. Its "glory days" were from 1883 to 1887 when \$60,000 monthly was produced. Population of the town reportedly reached a high of 500 souls.

Dark volcanic rock caps the hillside east of the mine and the underlying, lightcolored tuff was quarried and used for building stone. The mine office and the ruins of a number of houses built from this attractive material remain in various stages of decay. Stone rubble from dozens of dwellings occurs along a distance of about a half-mile down slope of the mine and is nearly hidden under a rather dense growth of desert flora. Exploration of the old townsite often turns up some interesting memorabalia.

The Bonanza King Mine is presently idle but not abandoned. Use caution around the headframes-there is a 540foot shaft below it. Numerous adits are to be seen on the hillside and over 20,000 feet of workings are underground.



Beaver

Wildlife "Americana"

by FRED W. KAYE

Own or give one This distinctive collector's quality, sculptured picture series • 63 subjects. Marble-like 7½"x7½"x½".

\$10.00 each, mailed, prepaid.

3954 Agate St., Riverside, California 92509



"Try the New One"



United Campgrounds of Moab

Location:

- · One mile north of Moab, and 1/2 mile from Colorado River
- Between Arches and Canyonlands National Parks
- · Near Dead Horse Point State Park

Facilities:

- · Level, shaded sites
- 88 Tent and Trailer Spaces
- · Full Hookups
- Swimming Pool
- Hot Showers
- Store and Laundry

For Campground brochure

and Reservations, write or call:



P. O. Box 370D, Moab, Utah 84532 UNITED CAMPGROUNDS OF MOAB (801) 259-7660

Mitchells Caverns

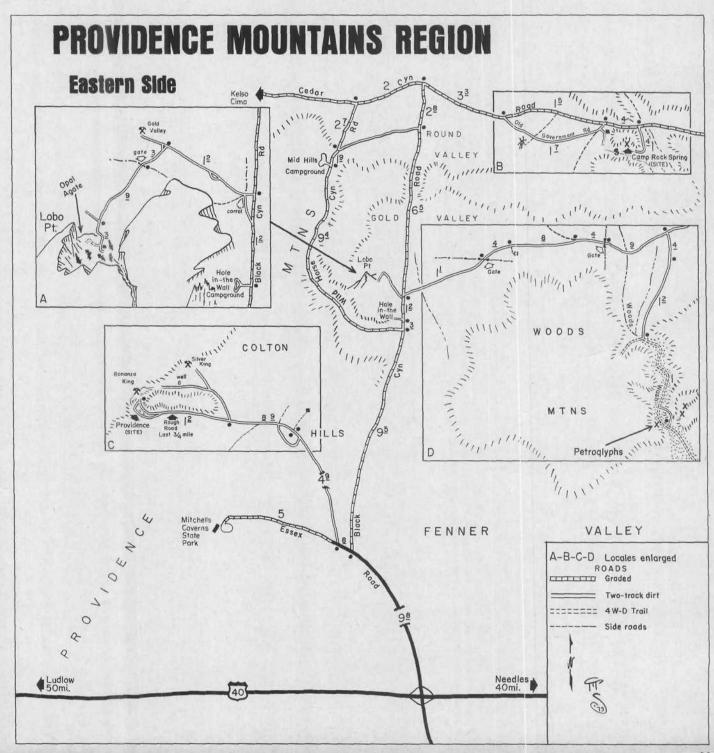
First time visitors to the Providence Mountain Region will want to take a tour of these fairyland caverns. A second cavern has been opened and spectacular lighting effects greatly enhance the limestone formations. The history of the caverns and the details of their formation is ably told by the Park Ranger Guide. The Caverns are open every day of the year and you will find the permanent park staff most cordial hosts. Tours are scheduled as follows: Daily 1:30 P.M., Saturday and Sunday 10 A.M., 1:30 and 3 P.M. Fees:

18 years and over, 50 cents; 6 through 17 years, 25 cents; 5 and under, free. An interesting display of typical local Indian artifacts will be found in the Park Office. You will also enjoy the Mary Beal Overlook and Nature Trail, Overnight camping is \$1.50 per night.

The Providence Mountain Region is an "island" of restful adventure for desert enthusiasts. We have barely touched on the variety of recreation it has to offer. Deep, high canyons await exploration; back-country trails challenge the daring; while gem fields lure the rockhound. A

winter sun can be warm and friendly to those who just want to rest and relax at Hole-In-The-Wall. Gentle breezes whisper their songs through the pines at Mid Hills Campground. Old Man Winter occasionally blankets them both with several inches of snow while Spring can bring a kaleidoscope of color to this desert garden spot.

This is a land of true enchantment—the Great Mojave Desert at its best. Yes, for you and me and other desert enthusiasts. The Providence Mountain Region has everything!



Monument Valley



Accommodations overlooking the monuments. Bring your camera for spectacular beauty of the 8th wonder of the world!

Write for brochure

Goulding's Lodge Trading Post and

Box 1-D, Monument Valley, Utah 84536

Phone 801-727-3231

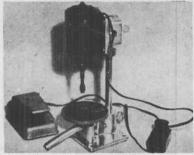
KOA is now in Monument Valley!

west Wallace were

Goulding's



Phone 801-727-3280



A Complete Miniature Lapidary Shop, the most versatile unit on the market today. For \$42.50 you get the basic unit.

By adding the items you need, for the work you intend to do; you can drill, saw, grind and polish. Cut all types of cabochons, both carved and plain. Working star rubies and sapphires is a natural with this machine. Do various types of carving in gemstone, wood or glass. You can etch or inlay glass, stone, wood or metal. Do faceting or make buttons. The bead and marble attachment will soon be available. There are buffing attachments for the gold or silversmith. The splitting and wafering saw is the answer to the opal cutter's dream.

The P.D.Q. Gem Drill is ideal for the person with limited space in the home, camper or trailer. There is a battery inverter available that enables you to take your P.D.Q. family with you on vacation, The P.D.Q. Lapidary equipment is compact, sturdy and inexpensive. A booklet of instructions and a guarantee card comes with each machine.

IDEAL CHRISTMAS GIFTS AT WAMPUM WIGWAM



Indian Jewelry is an item of beauty today and a priceless treasure of tomorrow. It is getting more scarce and higher priced as each year goes by and as older silversmiths pass to the "Great Beyond." Wampum Wigwam offers you authentic Indian-made items from the reservations and trading posts of our Southwest. May we send you a selection of Indian jewelry? This enables you to see the merchandise before you buy it. Pay for the items you keep and return the rest. Prices range from \$2.00 tie tacks and up, depending on amount of silver and turquoise in the item. State what items you would like to seegiving ring sizes or other information. Feel free to ask for a selection. We will do our best to help you.

SHIPLEY'S MINERAL HOUSE

On Hwy. 160 in southwest Colorado, 18 miles east of Durango or $1\frac{1}{2}$ miles west of Bayfield. Mailing Address:

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

Postage charges not included SEND FOR NEW CATALOG #9



Desert Ham

Continued from Page 13

was a delight and often a pain in the neck. Each evening he'd shake me down: he'd go through my pockets and snatch everything. He would pile the swag on the coffee table and examine each item to see if there was something new from last night's search. I had to watch him or he'd make off with something: a coin or pencil or key. Sometimes he'd out-fox me. We found his private stash. It contained all sorts of things we'd both missed-even a tiny bottle of Chanel 5.

That coon loved girls. Or maybe it was the perfume they wore. Nothing pleased him more than a party, when several girls were present. He'd sit on their shoulders and fondle their hair and grunt and groan with ecstasy. The girls thought he was sexy, and loved him.

The only thing that would make him leave them was when my lovely wife played the piano - beautifully, as only she could. Then he would perch on the piano and watch her and listen attentively. He really loved music.

He also loved to sit on my head, a stunt I'd taught him as a youngster and later wished I hadn't. As he got older and fatter, head-sitting became more difficult for him. And for me. He'd teeter and sway for balance, lean back, while hanging on to a strand of hair with each hand, like a fat driver tooling a stagecoach team.

As he got hog fat, I had to discourage this little pastime. But one evening, after cleaning out my pockets, he decided to recall an old pleasure and began climbing. He was fat-clumsy and raked my neck with a back claw. I yelled, pulled him down and slapped his big fat behind. He tore across the room, leaped to the divan where Margo was curled up reading a whodunnit. He plumped into her lap, while holding both hands over his eyes.

Margo petted and sympathized, "Aw, poor little Coony," she crooned. "Bob is an old meany, isn't he? He won't let you sit on his head. And he slapped you, too. You just sit here with Mama."

And he did. Needless to say, Coony never became a roast. The final curtain for our "desert ham" fell on a tragic note. Someone shot him one night, and we were plunged into gloom for weeks. We had lost one of the family, a loved one.



Oat finsb

aboutyour gift fist? Bea wise owl-.

Use Special Coupon on Page 45

subscriptions



Children display their collection of sea life fossils found in upper Rico Formation.

A woman found a perfect pre-dinosaur sea reptile tooth in this vicinity.

Below: This group on a March outing was fascinated by a deposit of strange minerals found lying on top of this Navajo Sandstone terrace. The agate-like mineral had fallen from the Carmel Formation, as had a petrified log found below the terrace.





ROCKHOUNDING IN

by F. A. Barnes

GOLD IS where you find it." This was a last-century cry of disgust at the fact that it was very difficult to use logic, or geologic knowledge, to find gold.

The same could also be said of mineral specimen collecting on most of this continent. Jumbled geologic formations, largely overlaid with sediments and further disguised with thick carpets of organic debris and plantlife, all conspire to make rockhounding in most of the United States as chancy as seeking gold in the 1850s.

The exceptions, of course, are in the younger mountain ranges, where the patient but persistent forces of erosion have still not worn down exposed cliffs and peaks and rugged slopes of exposed rock, or in the vast southwestern deserts where

the carpet of vegetative life is thin or non-existent.

The huge, sprawling deserts of California, Nevada, Arizona, New Mexico, eastern Washington and Oregon parts of Idaho and western Utah all offer an endless variety of conventional rockhounding, but even here the old cry of frustration is applicable. To the amateur rock collector, all this immense desertland looks much the same. Only a trained geologist can readily identify the geologic strata and formations, and thus predict with reasonable accuracy what minerals can most likely be found there.

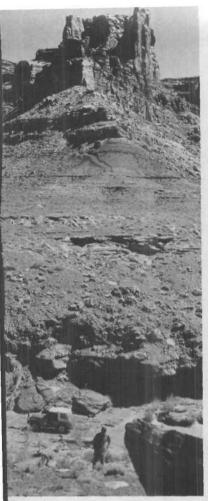
Southeastern Utah's canyonlands country is an exception to all this. There, the bones of old Mother Earth are laid bare, the exposed geologic strata are different from each other and easily identified, and a logical approach can be made to searching for mineral specimens. Still better, almost every stratum has something to offer of interest to rockhounds, and curious minerals are so plentiful that even the

most casual collector will have little difficulty in filling his pockets or bags with goodies.

There are all kinds of rock collectors, from the non-collector who stops along the road to take a picture or walk the dog and picks up a "pretty rock," to the casual type who seldom goes more than a few yards from a paved road, to the kind that loves to collect but whose specimens seldom get farther than a box in the garage, to the serious rockhound who not only collects specimens, but studies, identifies, labels, mounts, swaps, cuts, polishes and otherwise uses the best of the rocks he or she acquires.

For the more casual rock collectors only a few words of advice are necessary. Southeastern Utah is a rockhound paradise—just stop along the road almost anywhere, walk off the shoulder and start looking. You are bound to find something interesting almost immediately. In some places, even the gravel used as road fill contains minerals scarce in other parts of

D ...



Left: Here is ideal rockhounding country in southeastern Utah's canyonlands. High Wingate cliffs tower over a deep deposit of Chinle. The upper part of the Moenkopi begins at about camera level. Location: Hellroaring Canyon on the Green River, northwest of Moab. Below: An abandoned mine site in the Green River gorge was a bonus to a small group of explorers.





A local school girl on a field trip exhibits some fossil burrowing clams she found in the upper Rico Formation. Sea shell fossils of several types are common in this formation.

SOUTHEAST UTAH

the country, but don't take more than a sample or two. The state highway department frowns on people "collecting" its fill material.

For the more serious rockhound, collecting specimens in canyonlands country is a little more demanding, but also highly rewarding. Unless you prefer to follow the gold-is-where-you-find-it principle, a basic knowledge of the geology of the area is essential, because while each geologic layer of the dozen or more commonly exposed has something to offer, certain minerals and fossils appear only in a few or single layers.

It is thus necessary for the more ardent mineral collector to learn to identify the major geologic strata within southeastern Utah, especially if the amount of time available for collecting is limited. There is a difficult way to do this, and an easy way. The difficult way is to obtain a collection of geologic text and reference books, then slowly, painfully extract from each the limited information it contains

that is applicable to the unique southeastern Utah region.

The easy way is to obtain a good geologic map of this area, learn to identify the principal strata in the field, then use the map and guide-list of the types of specimens to be found in each layer to help in the search for what you want.

Geologic maps may be obtained from two different sources, the U.S. Geologic Survey and the Utah Geological and Mineralogical Survey. Both are to the same scale, 1:250,000, both contain a wealth of detailed geologic and geographic information and both are essentially topographic maps overlaid with color coding which identifies the geologic strata exposed on the surface. The differences are in size. The U.S.G.S. maps are smaller and it takes six of them to encompass southeastern Utah. The U.G. & M.S. covers the whole state of Utah in four maps, one for each quarter, thus only one map is needed for all of southeastern Utah.

For information and prices of the

U.S.G.S. maps, write the U.S.G.S. Distribution Office, Federal Center, Denver, Colorado 80225, and inquire about the map series on "Geology, Structure and Uranium Deposits," specifying the Price, Grand Junction, Salina, Moab, Escalante and Cortez quadrants if you want to cover all of southeastern Utah.

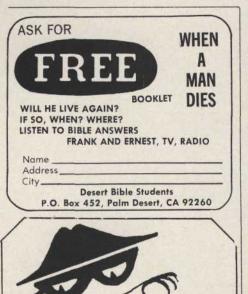
To obtain the U.G. & M.S. maps send \$4.00 for each quarter-state map desired to Utah Geological & Mineralogical Survey, 103 Utah Geological Survey Building, University of Utah, Salt Lake City, Utah 84112. Maps will be sent postpaid, unfolded.

The sequence of the principal geologic strata as they are exposed within south-eastern Utah's canyonlands country is as shown on the accompanying chart and in the following listing. The easiest way to identify the geologic formation found on a particular site in the field is to note some outstanding geologic features nearby, find these on your geologic-topographic map, then check the identification

October, 1973

of your site. This system can also work in reverse, if you are seeking an exposure of a particular formation. In time, you will learn to identify at a glance most of the major strata.

The following listing applies only to southeastern Utah and due to space limitations could not be comprehensive. It should, however, serve as a basic guide to





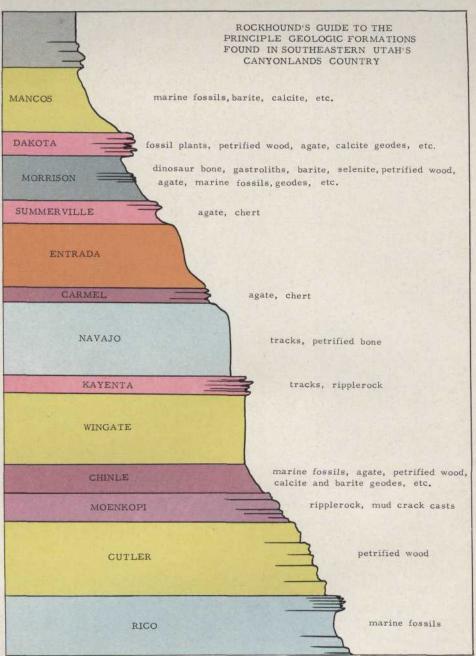
STOP THAT

THIEF WITH

Send for FREE Brochure Showing
Other Models to Fit Any Vehicle.
DEALER INQUIRIES INVITED.

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





those interested in collecting mineral specimens in the canyonlands region. It should be noted that the following list and accompanying chart do not cover the upper elevations of the Book Cliffs or the San Rafael Swell. Each of these areas is a whole story in itself, as are the lacolithic mountain ranges, the La Sals, Abajos and Henrys.

MANCOS SHALE: Soft gray-to-black marine shale up to 4000 feet thick, with occasional thin horizontal layers of sandstone. Appears as steep slopes if partially protected by higher strata, or open, hilly desert if overlying strata are gone. Supports very little vegetation. Contains marine fossils such as shells and fish teeth, and minerals such are barite and calcite.

DAKOTA SANDSTONE: Yellow-brown sandstone, interlayered with gray to black nonmarine shale. Varies in thickness up to 200 feet. Appears as layered ledges of sandstone above slopes of softer underlying sediments. Contains fossil plant impressions, petrified wood, agate, calcite geodes, limestone nodules and, in a few places, azurite balls and other copperbased minerals.

MORRISON FORMATION: Varicolored layers of mudstone shale and sandstone, plus occasional thin beds of limestone. Thickness varies from 250 to 500 feet. Readily identified by "painted desert" bands of blue-green, white, gray, red and purple on slopes capped by harder Dakota layers. Contains dinosaur bone and gastro-

liths, varieties of barite and selenite, petrified wood, agate, marine fossils geodes and minerals of uranium and manganese. SUMMERVILLE FORMATION: Red, gray, green and brown sandy shale and mudstone. Ranges from 60 to 150 feet in thickness. Appears principally as reddish sandy shale and fragmented harder layers. Contains large quantities of red, white and yellow chert and agate. These minerals tend to remain on top of the underlying Entrada sandstone as the softer Summerville sediments erode away.

ENTRADA SANDSTONE: White to reddish wind-deposited sandstone, varying in thickness from 60 to 550 feet. In appearance may be vertical cliffs if capped by younger strata, or rounded fins and domes if all overlying strata are gone. Has a tendency to form natural arches, especially at or near its interface with underlying strata. Contains tabular uranium-vanadium deposits in certain areas, but little to interest a mineral collector.

CARMEL FORMATION: Reddish mudstone and sandstone only a few feet thick. Considered by some geologists to be a part of the Entrada Formation. Often contains curious mineral deposits at or near the interface with underlying Navajo Sandstone. The soft, easily erodable nature of Carmel mudstone contributes to arch formation in the harder Entrada Sandstone above it.

NAVAJO SANDSTONE: White, orange-pink or gray-yellow wind-deposited sandstone varying up to 400 feet in thickness. Appears as sheer cliffs topped by rounded domes or fins, or as open areas dominated by weathered-rounded fins and "petrified dunes." Contains few minerals of interest, but is so easily identified it is useful as a key to identifying other stratas. A very few fossilized animal remains have been found in the Navajo, as well as tracks, but these are rate.

KAYENTA FORMATION: Alternate hard and soft layers of white, red, yellow and gray sandstone, with occasional thin beds of conglomerate and limestone. Ranges up to 250 feet in thickness. Appears as layered sandstone slabs at the top of Wingate Sandstone cliffs, or as expanses of broken, tilted slabs, where the overlying Navajo Sandstone is gone. Contains little in the way of collectable minerals, but the foot tracks of dinosaurs and other prehistoric animals are sometimes found, and beautiful ripplerock is common.

WINGATE SANDSTONE: Reddish-brown wind-deposited sandstone up to several hundred feet thick. Appears principally as near-vertical cliffs, with its upper surface generally protected by the horizontal layerings of Kayenta sandstone. Again, little to offer the mineral collector except as an easily recognizable identification key.

CHINLE FORMATION: Reddish-brown and orange-red siltstone interbedded with red sandstone, gray-to-green shale and lenses of conglomerates of various minerals. Ranges up to 600 feet thick. The most important part of the formation is the thick layer of soft shale that often lies just beneath vertical walls of Wingate Sandstone. This part of the Chinle somewhat resembles part of the Morrison Formation. Contains fossilized sea life, agate, petrified wood, calcite and barite geodes and a wide variety of mineral specimens. Much of the commercial uranium-vanadium mining is done in this formation.

MOENKOPI FORMATION: Dark brown to reddish-brown siltstone and sandstone, ranging in thickness up to 1,000 feet in places but generally far less than this. In appearance it is difficult to distinguish from the strata above and below. Contains little of interest to the collector except ripplerock and mud-crack casts.

CUTLER FORMATION: Dark red, brown and purplish mudstone and sandstone up to 3000 feet thick, even thicker in a few places. Two distinct members of this formation that appear in some places and not others are White Rim Sandstone, found principally within Canyonlands National Park, and Cedar Mesa Sandstone, found widely from about the center of this park on south and west. Both of these sandstone members are essentially white with light pastel tints. Contains little of interest to the collector except occasional petrified wood.

RICO FORMATION: Reddish-brown and greenish-gray sandstone, gray marine limestone and reddish siltstone, varying up to 650 feet thick. In appearance, the most distinguished part is the hard, gray limestone that immediately underlies the Cutler Formation and forms jutting ledges at the edges of canyons and gullies. Contains plentiful marine life fossils, such as shell and crinoids.

Of the geologic strata listed above, the most rewarding for rock and fossil collectors will be the Dakota, Morrison, Chinle and Rico formations. There is one other source that should not be overlooked, however. Along the shores of the principal rivers of southeastern Utah, the Green and Colorado, lie countless megatons of river gravel, abandoned on rocky ledges and terraces, and in rincons, as the rivers cut their beds deeper and ever deeper, or abandoned whole loops. For sheer variety, these deposits are hard to beat, because they contain specimens from every geologic formation through which the rivers or their tributaries have traveled.

When coming to southeastern Utah's canyonlands country for serious rock collecting, keep in mind the following hints:

- While an off-road vehicle is not absolutely essential, lack of one will severely limit access to this wild and broken land.
- It is illegal to collect mineral or fossil specimens of any sort within National or State Parks or National Monuments. Limited collecting is permitted within National Recreation Areas. For details, inquire at the specific Recreation Area headquarters.
- 3. Both Federal and Utah State laws protect "antiquities" from being collected or disturbed. This generally applies to archeological remnants, such as ruins, writings, pottery, and other human artifacts, and to recognizable remains of prehistoric animals. The non-commercial collection of small quantities of minerals, petrified wood and common sea-life fossils is permissible under these laws.
- 4. Major findings of archeological or paleontological interest should be reported to the Federal or State agency having jurisdiction over the discovery site. If in doubt, report to the nearest office of the Bureau of Land Management.

Rockhounding in southeastern Utah is as exciting, rewarding, and varied as anywhere in the country, and your search for choice specimens can have the added advantage of being reduced to a logical system.

But whether you prefer the systematic strata-searching approach, or the more random gravel-bar supermarket approach, you will not be disappointed. In southeasten Utah, rockhounding "gold" is where you find it—and you find it almost everywhere!



Ancient pueblo ruins weathering on the mesa top at Puye.

New Mexico's Puye Cliffs

Continued from Page 23

which fed Puye's reservoir had gone dry by the year 1600.

Whatever the reason for their departure though, the inhabitants of Puve have gone, leaving their desert city behind. Many of the endeavors of ancient labor have been destroyed by weather, and literally tons of artifacts were carried off by heavy-handed cowboys around the turn of the century. However, in 1907, Puye was more or less reborn—this time by modern standards. In that year, the Southwest Society of the Archeological Institute of America began an excavation and reconstruction of the site in an attempt to save what was left of Puye. In the initial months of the dig, the Santa Clara Indians objected repeatedly to the work, believing that the ancient graves of their ancestors should not be disturbed, even for the sake of science. Later though, realizing that the ruins one day may mean extra revenue for the tribe through tourists fees, Santa Clara agreed to the excavations, even helping out when they could.

In the years that followed, archeologists unearthed nearly 5000 artifacts from the ruins. Most of these remnants of the prehistoric culture of Puye are on display

in Santa Fe at the New Mexico State Museum, but the scientists didn't take everything. Today, visitors to the ruins can hardly walk the worn paths of the cliffs without stepping on bits of pottery or bead work, or now and then, an obsidian arrowhead lying forgotten in the lava dust.

The city itself, though, basn't been forgotten. Every year on August 12, the Santa Clara Indians hold a great feast atop the mesa, giving thanks to the Patron Saint of the Pueblo, Saint Clair, and honoring their ancestors at the same time. Indian women, dressed in traditional garb, spread their blankets on the hard earth and lay out their wares of pottery and jewelry. Sunbrowned men dance to the beat of hide drums playing age-old chants and children with feathers in their hair lead visitors about by the hand.

Although Puye is the least visited of all New Mexico's ruins, tourists pour into the area by the thousands for this one ceremony. Indian families take visitors under their wings, feed them, and explain the customs of the pueblo and the traditions of the dance. In return, most of the tourists leave with hands full of Santa Clara pottery or jewelry, purchased from the impromptu market place. By the end of the festive day, everyone goes home happy.

During the rest of the summer, even

though Puye does not have an overabundance of visiting tourists wandering the ruins, the area surrounding the cliffs is far from uninhabited. West of the old city a weatherbeaten dirt road winds into the nearby mountains, opening a rugged wilderness to fishermen, hikers, and nature lovers. Thousands of square miles of pinon and pine forests cover the land. Crystal-clear lakes and icy mountain streams are filled with trout—a five-pound rainbow isn't uncommon for a dedicated fisherman.

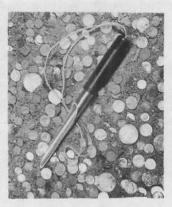
As the road progresses farther into the mountains, wildlife may pop out of the underbrush at any moment. Beaver inhabit most of the streams and ponds. Mule deer, black bear, and wild turkey venture into forest campsites seemingly unafraid. Only the Indians from Santa Clara are allowed to hunt, and then just when they need meat. Most of the Indians believe the animals of the Puye area to be sacred.

Some of the older Indians find it necessary to take meat from the forest for food. One of these is Margarito Tafoya. chief ranger, caretaker, and along with his wife, the only permanent residents of Puye Cliffs. A full-blooded Santa Claran, Margarito is 84 years old. Besides killing a deer now and then for meat, chopping his own firewood, and walking the steep trails of the ruins at least once a day in search of tourist trash. Margarito meets. each and every visitor that comes to the Puye. The old man, his face weathered by more than three quarters of a century in the desert sun, instantly becomes "Chief Tafoya" to everyone who meets him.

The Tafoyas reside in a tiny stone hut near the base of the mesa. Often during the winter they are completely snowed in.

"No problems," he explains to visitors who ask him if the winters are hard. "Take food from the forest, heat from the trees—just like my ancestors."

The stony paths where Indian women once walked with water pots balanced on their heads are deserted now, and the fields which grew vegetables for 2000 people are barren and dusty. But to the Tafoyas, and to the people who visit Puye each year, the memories and legends are still around, popping up in a broken pottery sherd lying in the dust or in a picture painted on the cliff face 400 years ago. Come and see for yourself . . . in the "Place where cotton-tail rabbits gather."



The Prospector

Here's a digging tool that should be readily accepted by park attendants-designed by a coin-shooting treasure hunter using a metal detector, the "Prospector" probes neatly into lawns and recovers lost coins or jewelry without tearing up the turf. The Prospector is light (less than 5 ounces) but rugged. It can probe deep into solid sod or hard packed dirt and scarcely leave a mark. Machined from a tough aluminum alloy, its metal hardness is less than most coins so coin damage is minimized. A foot long, with an anodized finish, it comes with an elastic cord for belt fastening. And when the Prospector is not finding coins it is great for digging weeds. A perfect mate for a metal detec-

The Prospector is priced at \$5.95. shipped postpaid. Engineered Things, P.O. Box 10022, Dept. D, Portland, OR 97210.

Desert Shopper

New and interesting products

Items appearing in this column are not paid advertisements



Emergency Siren-Flashlight

The Emergency Siren-Flashlight produces a loud continuous sound for use in an emergency, and is combined with a powerful flashlight with a slip-on translucent red lens cover for warning and signalling.

Ideal for automobile, truck, recreational vehicle and boat owners, campers, fishermen, etc. Should be in every car as standby emergency equipment, and in every home at protection against burglary, personal attack or loss of power.

Adjustable focussing, takes standard D' size cells, comes complete with shoulder strap. 2-cell model, \$8.95. 3-cell model, \$9.95.

U.S. International Marketing Co., Inc., 17057 Bellflower Blvd., Suite 205, Dept. D, Bellflower, Calif. 90706.



Trigger Action Circuit Tester

Here is a completely new design in 12-volt circuit testers which features an easy trigger action insulation-piercing contact point. Called "Circuit-Chek," the tester is designed especially for owners of recreational vehicles and boats—as an easy means of making hook-ups for trailer lights.

The tester also can be a real time saver when locating shorts or identifying wires when installing electrical accessories.

Easy to use, its unique design permits one hand operation and no pricked fingers while attempting to pierce insulation.

Retails for \$8.95, from Valley Tow-Rite, a division of Scott & Fetzer Co., 27 East Vine Street, Dept. DM, Lodi, CA 95240.



Universal's New Backpack

This new pack features the ultimate in workmanship, materials, and special features. It has an extra large volume bag for extended trips into the back country The bag is made of rugged Cordura Nylon and features extra lashing patches. The pack has 9 pockets, a padded waist band, and super-cool Leno mesh back band. The zipper is uniquely gentle on fabric and turns corners with much less resistance than most zippers. The "Expedition" backpack comes in two models: open bag and divided bag.

For the new Universal Catalog write Universal Field Equipment Co., Inc., Dept. DM, Mira Loma, California 91752.



Sliding Glass Windows

For Toyota Land Cruisers are wind and weatherproof, rattle-free and mount flush with body.

Now enjoy the convenience of fresh air plus easy access to outside ventilation and still retain a closed and locked window when you want it. This Land Cruiser accessory never goes to waste- summer or

Kit No. 101, \$37.95, contains all the mounting hardware, installation instructions, and measurements to cut glass. Everything you need except the glass.

Kit No. 102, \$67.95, includes Kit 101

plus the pre-cut glass, ready to install.

Tom's Auto Glass, 1401 25th Street, Dept. DM, Bakersfield, Calif. 93301.



RENTALS WITH OPTION TO BUY

14-Day

Money-

Guarantee

Back

WIDE-SCAN SEARCH LOOP! GROUND CONDITION ADJUSTMENT!

Prospecting and Hiking Equipment Books — Topo Maps

JACOBSEN SUPPLIERS

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



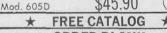
8" & 10" Koolerant Kontrolled

Trim Saws
throughout
Power Fe
Switch. A

im Saws Heavy duty throughout. Complete with Power Feed and Cut-Out Switch. Mod. 157D-10" \$217.50

Diamond Drill, Carver & Buffer

Special design saves diamond drills.
Ready to go—
less drills.
Mod. 605D \$45.90



ORDER BLANK Covington Engineering Corp.

P.O. Box 35D, Redlands, CA 92373
All Items Shipped Freight Collect For

All	items Shi	ppea	Fre	ight (ollect	10
Better	Service.	Amt.	Enc	losed	********	
C GE	A THMBI	FR	П	TRIM	SAW	

	GEM TUMBLER	TRIM SAW
	DRILL	FREE CATALO
ama		

Name	
Address	
Cit.	Charles

City_____State__

Rambling on Rocks

by Glenn and Martha Vargas

TANZANITE A New Gem

THE MINERAL zoisite was first described many years ago. It is one of a group with two others, epidote and clinozoisite. They are separated by the amount of iron in the molecule. Epidote has more than 10 percent of the total molecule as iron, clinozoisite about 10 percent, and zoisite has a very small amount or none.

None of these minerals were known to be especially colorful, although they produce interesting crystals. Epidote is usually an opaque green, but sometimes is a transparent brown. Clinozoisite is usually a yellow-green that is not of interest. Zoisite is often green, but is sometimes pink, and then is known as thulite. Thule is the ancient name for Norway, where thulite was first found. It has been cut into cabochon gems from a mottled pink and white material. Certainly this was a group of minerals that never tickled anyone's fancy from a gem standpoint.

Early in 1968 we were sent a piece of blue material that was reported to be zoisite. It was purchased at a high price by one of our friends, and he wished our opinion as to the validity of the identification. We gave it all the tests we knew of, and zoisite seemed correct, but we were doubtful. We sent it to another friend whom we felt knew more about mineral identification than we. His answer was, "It checks out to be zoisite, but I do not

believe it." We returned the piece to the owner with the above quite unsatisfactory comment.

Shortly thereafter, we received reports about a new gem variety of zoisite, found in 1967 in Tanzania, Africa. Reports were vivid and varied. The crystals were a fine blue with purple overtones; the mine was very small, with only limited output; large jewelry companies had bought up all the available supply, etc. Rumors were rife, and all gem cutters longed to see it and obtain some to cut.

Finally small parcels began to appear on the market, and the price was very high. Crystals about one inch in size, clear gemmy blue, were selling for about \$1,000 each. Most pieces were a very beautiful blue, some had a purple overtone, and a few showed an orange tone. Cutters bought them eagerly, and they produced excellent blue gems.

At first we simply referred to them as zoisite, but the name tanzanite, after the country of origin, was introduced. It was reported that this name was bestowed upon it by an American jewelry firm that had purchased most of the available supply. Shortly, the jewelry firm announced that they had a limited supply of fine large gems that they would introduce to the jewelry connoisseur. They no doubt had a small supply of fine gems, and they did offer them at an exclusive showing. Amateur gem cutters did a bit of snickering in that some of them already had gems of tanzanite. This was true, but it can be certainly said that few of these amateurs had gems as nice as were offered at the showing.

A large mineral dealer had introduced some of the material at about the same time as the jewelry firm obtained theirs. He objected to the name tanzanite on the basis that he had introduced the first pieces to this country, and thus should have had the privilege of naming the gem.

RIVERSIDE COUNTY'S LARGEST 4-WHEEL-DRIVE HEADQUARTERS

Accessories for All Makes



JOHNSON'S

SALES and SERVICE

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



He promptly named the gem after himself. He printed advertising calendars picturing the mineral named after himself. He wrote an article for a magazine arguing that the second name should be valid. Through all of this, tanzanite it became, and tanzanite it has stayed.

After thorough investigation by good mineralogists and gemologists, we were given the full story. The crystals are found in small deposits over a fairly wide area of one state of the country. They are found in many colors—blue, green, yellow, pink, brown, and "khaki," referring to the color of brownish cloth. After a time we saw many of these colors.

We are not completely sure yet, but we suspect that few, if any, of the crystals are ever found as the beautiful and coveted blue. Where does the color come from? It is induced by heating the crystals to about 700 degrees F.

To explain some of the seeming paradoxes noted above, we must mention one of the interesting behaviorisms of zoisite. Like a large number of minerals, when transparent, it shows different colors through different directions. Zoisite shows three colors, one through each direction of the crystal. The most common three are blue, purple and orange. In a rough piece these tend to mix a bit, and the result is not always beautiful. However, in most pieces, one color is usually predominant. If a gem is cut from one of these, the blue may be tinged with purple, or orange, or both.

Color in transparent minerals is due to the absorption of color as light passes through. If a mineral appears blue, then all colors except blue are absorbed by it. It is known that, in most cases, the absorption is due to a screening action of stray impurities of various elements locked within the molecule of the mineral. In some cases at least, the actual position of the stray impurity can control the color (see our November 1971 column). If the impurity makes a mineral green when it lies in a certain position in the molecule, it may make the mineral blue if it is forced to occupy another position.

This is evidently what happens in zoisite when it is turned into tanzanite. Heat changes the position of some invisible atom and forces the absorption of all but blue in all directions. We have been able to obtain some of these odd colored pieces of the mineral; yellow, orange, bluish and brownish. When we placed them in an oven and heated them to approximately 600 degrees, most of them took on the intense blue in two directions, and a purple in the third. If we heated them to the 700 degrees, nearly all pieces became the intense blue in all directions. It is interesting in that always a few remained with two colors and some with three, but always one of these was the intense blue.

Most of the good cutting material on the market is completely blue, but some shows one or more of the other colors above. We have had the opportunity to cut gems that show each of these separate colors. A suite of three gems, one blue, the second purple, and the third orange is a striking display.

Today, tanzanite is not a usual thing on the market. We receive rumors and stories again. We are told that the mines are worked out; that all the available material is going to foreign jewelry firms; that the Tanzanian government has placed an embargo on its shipment; and other rumors as well. One thing we know for certain—regardless of what reason may be given, the quality of what is on the market is below that of what it was at one time.

Recently we were told that the mines were to be reopened. We wonder if they were ever closed! Who knows? The story of tanzanite has gone full circle in just a little over five years!



FREE 1973

148 PAGE CATALOG

OF DETECTORS—BOOKS—MAPS GENERAL ELECTRONIC DETECTION CO.

16238 Lakewood Blvd.
Bellflower, California 90706

TREASURE HUNTERS-PROSPECTORS

FREE CATALOG!

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

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

AUROR4

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

2ND LOCATION

Coe & Coe Prospector Supply

9264 Katella, Anaheim, Calif. 92804 Phone (714) 995-1703



The Craftool Company, Dept. DM 1421 W. 240 St., Harbor City, Cal. 90710

Send me information on the Rolling Star Tumbler Line

AT THE NEW

CRAFTOOL STORE

Send Craftool Catalog. I enclose \$1.00

Complete

The Trading Post Classified Ads

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.

TWO FANTASTIC BOOKS. "Relics of the Redman"—Loaded with Indian relics. "Relics of the Whiteman"—Packed full of Pioneer relics. Both books contain photos, many in full color, information on how and where to look, how to sell, etc. Relic prices are listed below each photo. These books make perfect gifts. Only \$3.95 each or \$7.00 for both. Order from Winema Publications, P.O. Box 276, Ashland, Ore. 97520. Include 30c for postage and handling. Dealer Inquiries Invited.

FIND A FORTUNE! Know what old books are worth. New Price Guide identifies over a thousand valuable novels. Satisfaction guaranteed. \$4 value now only \$3.25. Price Guide, Dept. A-7, Box 368, Mesilla Park, New Mexico 88047.

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.

PROSPECTORS HANDBOOK, an easy-to-use pocket handbook using process of elimination tables, pocket knife, copper coin and piece of milky quartz. Send \$1.50 to Prospectors Handbook, 1605 Roberson Lane, Fallon, Nevada 89406.

GUIDE TO MEXICO'S gems and minerals: localities, mines, maps, directions, contacts. English-Spanish glossary, too. \$2.00 plus 20¢ postage. Gemac, Mentone, Calif. 92359.

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.

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.

"GEMS & MINERALS," the monthly guide to gems, minerals, and rock hobby fun, \$4.75 year. Sample 35¢. Gems & Minerals, Mentone, California 92359.

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

"PEGLEG'S LOST GOLD," by Rascoe; lost black gold, Southern California, from 1820's to date, including Nevada, Arizona. 102 pages, \$3.00. Frontier Book Company, Fort Davis, Texas 79734.

EQUIPMENT

GOLD DRYWASHERS for fun and profit. \$29.95 to \$199.95. Free information. Wilkins Enterprises. P.O. Box 1122, Huntington Beach, Calif. 92647.

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.

INDIAN GOODS

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

ARROWHEADS-ARTIFACTS, Birdpoints, Gamepoints, Darts \$1.00 each, 3/\$2.00 - 12/\$6.00. List available. Arrowhead's West, P.O. Box 80, Barstow, Calif. 92311.

FINE RESERVATION-MADE Navajo, Zuni, Hopi jewelry and Kachina dolls, Navajo rugs, Yei blankets, Chimayo blankets and vests, pottery. Nambe 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.

MAPS

REC-MAPS—New series Southern California topographic maps, photoreduced and printed on 8 ½" by 11" facing sheets. Updated with new roads, popular gem and mineral hunting locations and ghost towns. Write R V Equipment, P.O. Box 1045D, Monrovia, Calif. 91016. Dealer inquiries invited.

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., 2252 N. Kildare Ave., Dept. DM, Chicago, Illinois 60639.

MINING

ASSAYS. COMPLETE, accurate, guaranteed. Highest quality spectrographic. Only \$5.00 per sample. Reed Engineering, Suite C, 1140 N. Lemon St., Orange, Calif. 92667.

OLD COINS, STAMPS

SILVER DOLLARS, UNCIRCULATED 1880-81 S, 1883-84-85 O Mint \$8.00 ea. Catalog 50c. Shultz, Box 746, Salt Lake City, Utah 84110.

REAL ESTATE

GOVERNMENT LANDS—Low as \$1.25 Acrel Buy, lease or homestead. Free details! Lands Digest, Box 25561-DM, Seattle, WA. 98125.

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.

REAL ESTATE

ATTENTION: SECURITY ORIENTED RETIREES.
Lease/Sale—Five room house, 2000' elev. Dry
Climate. On secondary highway between Hollister and Fresno. All utilities. Min. dollar and
maintenance. Ideal permanent or travel base.
A. E. Otis, 234 Spreckles Drive, Aptos, Calif.
95003.

GOVERNMENT LANDSI . . . From \$7.50 ACRE! Vacationing, Farming, Investment! Exclusive "Government Land Buyer's Guide" . . . plus "Land Opportunity Review" listing lands throughout U.S. Send \$1.00. Surplus Lands, Box 6588-RJ, Washington, D.C. 20009.

TRAVEL

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

TREASURE FINDERS

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.

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.

PROFESSIONAL Metal and coin locator. Free illustrated catalog. Leading manufacturer. 40 years. Fisher Laboratories, Room 1048-R, Box 490, Belmont, CA 94002.

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 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.

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

MISCELLANEOUS

MAKE MONEY writing short paragraphs. Use your special knowledge of rocks, minerals, the desert to write fillers that sell. Booklet tells how and where to sell your paragraphs. Only \$1.00 from Hallcraft, Dept. 2, 308 Mulberry, O'Fallon, Ill. 62269.

SELL YOUR PHOTOSI Excellent report reveals How, Where, Color Slide Markets. Only \$1.00. Serendipity House, 3418 Thunderbird Avenue, Glendale, Arizona 85307.

PROFESSIONAL ART BY MAIL—The only one of its kind you have been looking for. Courses approved by California Dept. of Education. Send for Free Brochure. Roy Keister College of Fine Arts, 19 Washington Street, Santa Clara, Calif. 95050.

Desert Magazine

MISCELLANEOUS

GUMMED NAME AND Address Labels: 1000—\$1, 3000—\$2.25. Three-week delivery. C. Friday, 4705 Adam Rd., Simi Valley, Calif. 93063.

NEEDLEPOINT PORTRAITS. Your photograph handpainted on 14x18 needlepoint canvas. Yarn and complete instructions included. Send photograph and \$24.95 to Hallcraft, Dept. 2, 308 Mulberry, O'Fallon, Illinois 62269.

SWIM POOL OWNERS!!! Beat the cost of heating pool. Capture Solar heat. New, inexpensive, Build-It-Yourself Directions for Solar Heater. Write; free information: Recreation, Box 722-D, Redlands, California 92373.

MAKE MONEY on Government Surplus. How and where to buy. Directory of surplus offices. Sale terms. Mail order items. Send \$1.00. Specialty Merchandise Co., 7659 So. 42nd St., Omaha, Nebraska 68147.

YOUR OLD COMIC BOOKS, Buttons, Toys, may be valuable. Fully illustrated book tells where to buy and sell your collectibles. Only \$1.95. Hallcraft, Dept. 2, 308 Mulberry, O'Fallon, Illinois 62269.

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

FREE! New Illustrated Catalog of Unique Gifts. Satisfaction Guaranteed. Bonus Gifts with Purchases. Serendipity House, 3418 Thunderbird Avenue, Glendale, Arizona 85307.

ANTIQUE DEALER'S HANDBOOK. List wholesale, retail prices for thousands of antiques. Hundreds of illustrations. 224-page book only \$1.95. Order from Hallcraft, Dept. 2, 308 Mulberry, O'Fallon, Illinois 62269.

DesertSUBSCRIPTION

HANDY BOOK ORDER FORM

ADDRESS.

ZIP CODE

California residents add 6% sales tax.

TOTAL

Desert MAGAZINE BOOK SHOP

P.O. Box 1318, Palm Desert, California 92260

FORM .	
	☐ ENTER A NEW SUBSCRIPTION ☐ RENEW MY PRESENT SUBSCRIPTION
	NAME
0 (a)	ADDRESS ZIP CODE
	SEND GIFT SUBSCRIPTION TO:
	NAME
	ADDRESS
	Sign Gift Card: "From
One Year \$5.00 PAYMENT ENCLOSED	NAME
Two Years \$9.50 BILL ME LATER (Or 2 One Years)	ADDRESS
Three Years \$13.00 (Or Three One Years)	Sign Gift Card: "From
☐ ALSO SEND DESERT'S 12-ISSUE HANDSOME	NAME
BROWN VINYL BINDER FOR \$3.50 (includes tax and postage) Undated	ADDRESS
Date Binder(s) with Year(s)	Sign Gift Card: "From
Go ahead, cut up your magazin	ne, just check this box [] and we will replace it immediately!

Letters to the Editor

Letters requesting answers must include stamped self-addressed envelope.

Query on Equipment . . .

We noticed in a recent issue that your Field Trip Editor has acquired new RV equipment. We would be interested in just how they fitted it out to tour the back country.

> JOHN ARGUS, Montebello, California.

Editor's Note: Here is M. F. Strong's reply: The basic unit is a 1972 Chevrolet, 4-W-D, ½-ton Pickup with a short bed. 4-speed stick shift, 3.73 axle ratio, positraction and a 350 GID engine.

Accessories include: 5-channel, Johnson Messenger CB Radio, Runabout 32" Camper shell, auxiliary fuel tank. In addition, we carry a Honda Mini Trial 50cc on the front bumper and a Honda Trail 90cc bike inside the camper.

We are very pleased with the way our Four-Wheeler performs. Even when carrying the above load plus tools, extra water, a 100-pound Malemute, lots of rocks and pulling a well-stocked 22-foot Santa Fe trailer, it holds the road well, handles very easily and doesn't overheat on long grades. According to reports given us by others, we are getting exceptionally good mileage.

In 4-W-D country, all that stops us is a very "narrow slit" in a canyon wall!

Though we live on the desert, you will note we do not have air-conditioning. We do not like it. As long as we are moving, the heat doesn't bother us and when we stop the contrast isn't too great a shock—which it certainly is when leaving an air-conditioned vehicle. This is, of course, a matter of personal preference—we accept our desert in all its many phases—M.F.

Eager For More . . .

Some time ago I read an article in your magazine by Mr. Eugene C. Stoddart, curator of the White Pine Museum in Ely, Nevada. This article concerned rocks to be found in that area as well as other interesting items, and I would surely like to see some more of his work in your magazine. I am sure a great many rock-hounds found his article helpful and interesting.

MELVIN B. AIRD, Berry Creek, Calif.

Calendar of Events

OCTOBER 5 - 7 WASATCH GEMS SOCIETY SECOND ANNUAL CARNIVAL OF GEMS, Utah State Fair Grounds, Commercial Exhibit Building No. 3, North Temple and Ninth West, Salt Lake City, Utah. Show Chairman, Joseph Cipponeri, 1849 David Blvd., Bountiful, Utah 84010.

OCTOBER 6 & 7—DESERT GEM-O-RAMA. presented by Searles Valley Gem & Mineral Society. Trona Recreation Hall, Trona, Calif. Camping space available, \$1.00 fee. Dealers. field trips and Searles Lake crystals. Admission free. For more information, contact Jenny Langner, 654 Trisha Ct.; Ridgecrest, CA. 93555.

OCTOBER 6 & 7, SOUTH GATE CARNI-VAL OF GEMS sponsored by the South Gate Mineral and Lapidary Club, South Gate Park Auditorium, 4900 Southern Ave., South Gate, Calif. Free parking and admission. No dealers. Write Harry Hensel, 1830 E. 68th St., Los Angeles, Calif. 90001.

OCTOBER 6 & 7, "EARTH'S TREASURES" sponsored by the Nevada County Gem & Mineral Society, National Guard Armory Bldg., Ridge Rd. and Nevada City Highway, Nevada City, California. Admission free. Prize drawings, demonstrations.

OCTOBER 6-7, SIXTH ANNUAL NATION-AL PROSPECTORS & TREASURE HUNTERS CONVENTION, sponsored by the Prospectors Club of Southern California, Inc. will be held at Galileo Park in California City, Calif., (approximately 100 miles north of Los Angeles). There will be five competitive events, with everyone invited to participate. The latest in prospecting and TH'ing equipment will be displayed, and many well-known personalities in the TH'ing field will be on hand. Admission free to convention. No charge for parking or camping. For those who do not wish to camp, there are restaurant and motel accommodations in California City. For further information contact: S. T. Conatser, PCSC Convention Chairman, 5704 Eunice, Simi Valley, CA 93063.

OCTOBER 6-7, THE HI-DESERT GEM & MINERAL ASSOCIATION'S 2nd annual show hosted by Yucca Valley Gem & Mineral Society; Joshua Tree Gem & Mineral Society; Hi-Desert Rockhounds of Morongo Valley and Oasis Rock Club of 29 Palms, will be held at the Yucca Valley High School, 7600 Sage Ave., Yucca Valley, Calif.

OCTOBER 7-13, 6TH ANNUAL NATIONAL SILVER STREAK RALLY, Golden Village, Hemet, Calif. All Silver Streak owners, whether club members or not, invited to rally. For further information, contact V. L. Cooper, rally coordinator, Silver Streak Trailer Company, 3219 N. Chico, So. El Monte, Calif. 91733.

OCTOBER 12-14, ANNUAL TUCSON LAPIDARY AND GEM SHOW. Sponsored by the Old Pueblo Lapidary Club, Inc. Tucson Rodeo Grounds, 4700 block South Sixth Ave., Tucson, Arizona. Dealers. Show chairman: Milton Reiner, 2802 East 10th St., Tucson, Ariz. 85716.

OCTOBER 13 & 14, AMERICAN OPAL SO-CIETY'S SIXTH ANNUAL OPAL SHOW, Downey Woman's Club, 9813 S. Paramount Blvd., Downey, Calif. Free admission and parking. For information, contact Marvin L. Wilson, 12737 Rosecrans, Norwalk, Calif. 90650.

OCTOBER 13 & 14, LA PUENTE GEM & MINERAL CLUB'S 4th Annual Show, "Wonders of Nature," La Puente Handball Club Bldg., 15858 Amar Rd., La Puente, Calif. Dealers, Silent Auctions. Chairman: Raymond Whaley Sr., 4031 Hackley, West Covina, Calif.

OCTOBER 18-21—PLAZA OF GEMS AND MINERALS, sponsored by the Pomona Rockhounds Club. Montclair Plaza Shopping Center, San Bernardino Freeway and Central Ave., Montclair, Calif. Thurs. & Fri., 10-9:30; Sat. 10-6; Sun. 12-5. Geo. Beaman, 1295 Loma Vista, Pomona, Calif 91766. Dealers, guest exhibits, working demonstrations, free parking and admission.

OCTOBER 20 & 21, WHITTIER GEM AND MINERAL SOCIETY'S 24th Annual Gem Show, Palm Park, 5703 S. Palm Ave., Whittier, Calif. Free admission and parking. Publicity Chairman Pearl Stroh.

NOVEMBER 3 & 4, 13TH ANNUAL GEM AND MINERAL SHOW sponsored by the Twentynine Palms Gem and Mineral Society. Hayes Auditorium, Intermediate School, Utah Trail, Twentynine Palms, Calif. Dealers. Free admission. Chairman: Mrs. Rhoda Carlton, P.O. Box 505, Twentynine Palms, Calif. 92277.

NOVEMBER 3 & 4, ANNUAL ROCK AND MINERAL SHOW, sponsored by the Bear Gulch Rock Club, Masonic Hall, 1025 N. Vine Ave., Ontario, Calif. Exhibits, dealers. Admission free. Mary Pearson, chairman, 7178 Agate St. Alta Loma, Calif. 91701.

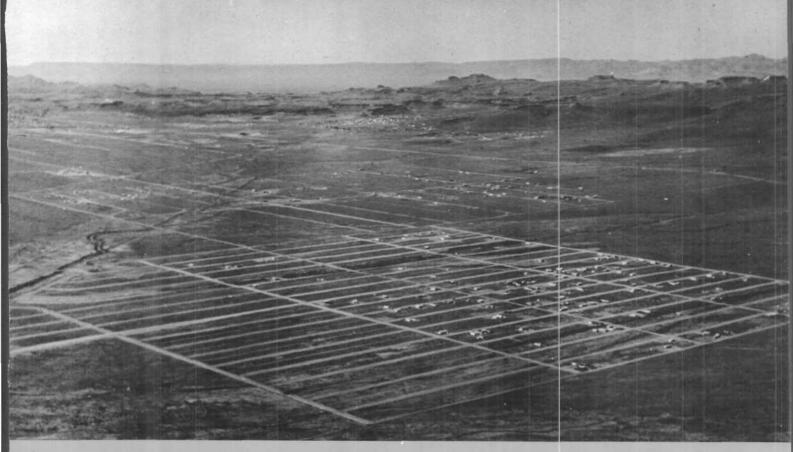
NOVEMBER 3 & 4, ELEVENTH ANNUAL SAN DIEGO COUNTY ROCKHOUND GEMBOREE sponsored by the Council of the San Diego County Gem & Mineral Societies. Scottish Rite Masonic Memorial Center, 1895 Camino Del Rio South, San Diego, Calif. Chairman: Elmer Schmitt. Dealer Chairman: Mrs. Marian Horensky.

NOVEMBER 10, OPEN HOUSE at the new home of the Research Center for the Study of Early Man of the Archeological Survey Association of Southern California, 1251 Palomares St., La Verne, Calif.

Desert Magazine

LARGE LEVEL LOTS

WATER - POWER - TELEPHONE



\$995.00 FULL PRICE

\$2000 Down & \$2000 Per Month

GRAVEL STREETS

NO CLOSING COSTS

SCHOOL BUS NO OBLIGATION TRAILERS WELCOME

NO INTEREST

DAILY MAIL SERVICE NO SALESMAN WILL CALL STAKED LOTS

NO CARRYING CHARGE

FIRE PROTECTION

50' x 120' MINIMUM LOT SIZE

Elmer Butler

FREE MAPS AND PICTURES

Box 486, Kingman, Arizona 86401

Park Your Trailer - Build Your Home - Hold For Investment

OFFICE OPEN SEVEN DAYS A WEEK

TELEPHONE (602) 757-2781

