

The American Indian Index—Gregory W. Frazier. Here is the key to accessing American Indians and Alaska Natives and the large volume of data concerning their cultures and traditions. Over 6.000 listings include dates of powwows and other events, locations of Indian museums and cultural centers, Indian publications and Indian Arts & Crafts outlets. Valuable reference work for historians, anthropologists, archaeologists, librarians, teachers, students, vacationers. (#501) 19.95

Cacti of the Southwest—W. Hubert Earle. Considered by many to be the best cactus book ever published for the layman, this excellent field guide covers the Southwest U.S. and Northern Mexico. Plants are described in plain English, with concise descriptions and plant history, glossary, biography. Useful sections on cactus structure, culture and greenhouse cultivation. 151 full-color and 156 B&W photos. (#502) 15.95

The Cahuilla Landscape—Bean, Vane & Young. The Indians who inhabited the Santa Rosa and San Jacinto Mountains had a complex world view, an elaborate cosmology, rich oral literature and a sophisticated musical heritage. Whether you hike their trails or travel by armchair, you will enjoy getting to know these mountains and their Cahuilla Indian past. (#503) 14.95

The California Wine Country Cookbook—Robert & Virginia Hoffman. 58 chefs, winemakers, and wineries share 162 of their favorite recipes with you. Here are recipes for appetizers, soups, salads, pastas and grains, meats, seafood, poultry, vegetables and desserts. Some recipes are easy and fast, others result in culinary masterpieces. Page 99 is worth the price of the book! (#504) 12.95

Chili-Lovers' Cook Book—Al & Mildred Fischer. For purists who want their chili without beans, and for devotees who say chili tastes better with beans, the authors have gathered a variety of recipes that will appeal to all the feisty, fiery, friendly, obstinate, opinionated, ornery, peppery and pugnacious lovers of chile pod and chili pot who passionately crave their chili! (#505) 5.95

Country Bound!—Marilyn & Tom Ross. Trade your business suit blues for blue jean dreams, here are hundreds of tips for earning a living in rural America that will help you escape the big city, earn a good living in the country, and enjoy a better quality of life. Practical and thought-provoking. (#506) 19.95

Crossing the Border Fast & Easy—McDonald, Meldman, Gonzales & Moncada. You'll wish you had this guidebook on every visit you ever made to Baja, and you'll never again want to



be without it! How to avoid long lines of overheated cars, and find the shortest route home every time. Insurance info, driving, walking and bargain shopping maps, taxi tips, customs help, what to say to the nice border inspector. (#507) 6.95

Delfina Cuero—Shipek & Robertson. With simple elegance the story of a Kumeyaay woman from the San Diego region engulfs the reader, until we feel as though we are sitting at the feet of a grandmother who is passing on something of worth from her life. Here are the memories and thoughts of a woman who remembered old ways and described the changing scene in simple sentences that speak volumes. (#508) 12.00

Desert in Bloom—David L. Eppele. Few sights are as stirring and sumptuous as the Southwestern desert in full bloom, an occurrence both rare and brief. This large-format picture book is lavish with color photos of flora and cacti of the desert in their native habitat. Scientific and common names. (#509) 6.95

The Encyclopedia of Sauces for your Pasta—Charles A. Bellissino. This huge 533-page 8-1/2 x 11 book is a definitive work of almost 425 outstanding pasta sauces, including 142 that can be prepared in the length of time it takes your pasta to cook. Selection includes old favorites and secret old family recipes from Italy and America. Cross-referenced index allows you to search for a sauce by chief ingredients. (#510) 29.95

Fishing Arizona—Guy J. Sagi. A noted outdoors writer takes you fishing on 50 of Arizona's most popular lakes and streams, revealing where, when and how to catch those lunkers that swim into every fisherman's dream. License and permit information, fish types, tournament results, current catch records, best bait and lures, travel directions, general maps of each lake. (#511) 7.95

Gardening From The Heart— Carol Olwell. There are 70 million gardening households in the United States, a number that increases yearly. Illustrated with more than 80 beautiful color photos, this book explores why people garden

with more than 80 beautiful color photos, this book explores why people garden and describes the pleasures and satisfaction that gardening brings. An elegant book comprised of 21 interviews with western gardeners. (#512) 18.95 Ghost Towns and Historical Haunts in Arizona—Thelma Heatwole. Step into Arizona's past and visit adobe ruins, old mines, cemeteries, cabins and castles with a prize-winning journalist. The author has a particular fascination for ghost towns, and has long captured the public imagination with her tales and photos of these places in the pages of Arizona Republic. (#513) 5.95

La Cocina Bilingue—Elizabeth Reid. Presented in both Spanish and English, here are delicious, exotic recipes, both spicy and mild, easy and challenging, from throughout Latin America. Overcome the language barrier and become a gourmet cook at the same time. In addition to well-known Mexican dishes, you will be delighted with those from the boisterous Caribbean and more temperate Argentina. (#514) 12.95

Los Remedios—Moore & Kamp. Traditional herbal remedies of the Southwest, handed down for generations, are now attracting increased interest from both alternative and mainstream health care professionals. Illustrated text covers preparation of 170 healing botanicals and their therapeutic use. (#515) 9.95

The Lowfat Mexican Cookbook—Robert & Nancy Leos. Do you love Mexican food but hate the calories? Now you can enjoy great tasting Mexican dishes without all the fat and cholesterol. It's easy to make low-fat tacos, flautas, enchiladas, chicken, seafood and more—without any loss of the flavors that make this one of the world's most popular cuisines. (#516) 6.95

Mexican Family Favorites Cook Book—Maria Teresa Bermúdez. Often imitated, but nothing compares to authentic Mexican dishes, especially family favorites. Here are the recipes of a Southwestern Mexican-American family's best-loved & everyday dishes. (#517) 5.95

Profits From Your Backyard Herb Garden—Lee Sturdivant. Written for the spare time gardener with a small space to grow in, this book details which herbs to grow, how to package, label and sell them to local grocers and restaurants, and provides simple billing and

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Event Horizon Press, Post Office Box 867, Desert Hot Springs, CA 92240. bookkeeping methods. The author promises that her techniques will bring an income of \$50 to \$250 weekly. Includes a chapter on growing and selling edible flowers and blossoms. (#518) 10.95

Quest for the Dutchman's Gold—Robert Sikorsky. Read the facts, myths and legends of the Lost Dutchman Mine and the Superstition Mountains, as collected by geologist Sikorsky. Includes maps and numerous photos. (#519) 6.95

Realm of the Long Eyes—James E. Kloeppel. Nestled among the piñon pines of southwestern Arizona, Kitt Peak National Observatory houses the world's largest concentration of optical telescopes and astronomical instruments. Each year 100,000 tourists and astronomers visit this modern astronomical observatory, in an attempt to unlock the mysteries of the universe. (#520) 15.00

Rick O'Shay, Hipshot, and Me-

Stan Lynde. For 20 years, lawman Rick O'Shay and his gunslinger compadre Hipshot Percussion rode the newspaper pages in one of the best western comic strips ever published. Now the entire cast of the award-winning strip is brought back to life in a beautiful memoir-anthology and an all-new series of full-color illustrated novels, written and drawn by the strip's creator, cartoonist Stan Lynde. 3-book package. (#521) 24.95

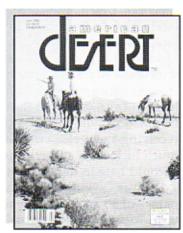
San Diego Originals—Theodore W. Fuller. Virginia Scripps chased after an occasional man with a stick when she spotted them littering. Lt. Geo. Horatio Derby once used a red hot branding iron on a man, who later believed he had been blessed by a miracle. Wyatt and Josie Earp developed a stable of trotters after he won a horse in a poker game. A lovely, sometimes irreverent look at 59 men and women who made an indelible imprint on the San Diego area. (#522) 19.95

Spanish Lingo for the Savvy Gringo—Elizabeth Reid. A do-it-your-self guide to learning the language, this book will make your contacts with Spanish speaking people on both sides of the border less mystifying. Teaches you words to make your trips to Mexico and Latin America more fun, helps you remember the Spanish you learned in high school, but forgot. (#523) 12.95

Vigilante Victims—Mather & Bosneell. During a 30-day purge of mining camps in 1864, vigilantes hanged 21 alleged members of "the most perfectly organized outlaw band of the West," rumored to have robbed and murdered 100 citizens. Some were escaped convicts, other lynch victims had committed no crime—including the elected Sheriff of the miners, and three deputies. Most surprising, the alleged robber gang probably did not exist! (#524) 19.95

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From The Publisher

ow many of us think of Oregon as a "desert" state? Not, many, if you are like me. Our author, Patrick Pilcher, has focused on an area that merits exploring and enjoying. If you really love deserts, this is probably a place to visit during the summer months when most other areas are too hot to be out and about.

Speaking of "out and about", I recently had the privilege of joining one of the four-wheel drive caravans on the East Mojave Heritage Trail with other members of Friends of Mojave Road. We spent a weekend driving by scenic spots, spectacular mountains and old ranch houses in the Fourth Segment-Fenner to Needles, sticking to the designated trails. Each vehicle has a CB radio so the leader can point out places and objects of interest as they are passed. For those who need to refresh their memory, a series of guidebooks elaborates on the history or science behind each place. Courtesy is the order of the day, and the peace of the desert was never once marred by blasting radios or tapes. As it was full moon that weekend, I especially enjoyed sleeping outside in the clear desert air, after a friendly evening around the campfire.

Although we only received two responses to the "Five Favorite Books" contest, we decided to print the two entries with the prize going to J.C. Moore, who will receive a copy of "The Desert Reader" by Peter Wild.

Readers of the old Desert magazine will be pleased to read the story of Harrison Doyle's teenage years in Needles. Join us in a nostalgic trip with this and other great stories in this issue.

Keep cool in the coming summer months (try the cactus ice cream recipe on page 13) and spread the word about American Desert.

Joan Brooks, Publisher

Letters to the Editor

Dear Editor:

It's great to see, after a decade, an "old friend" back – American Desert magazine. I particularly found interesting the Flash Flood article in the December 1992 American Desert.

As the former meteorologist in charge of National Weather Service Officer's (NWS) in Tucson and Winnemucca, Nevada; deputy meteorologist in charge of the New Mexico NWS National Program for Disaster Preparedness & Awareness, I thought the authors of "Two Flash-Flood Chasers" explained the possible results of encountering a flash flood rather well.

Over 50 percent of all flash flood fatalities are vehicle related and another 20 percent are those who camp along waterways only to be washed away from heavy rains occurring possibly many miles away. Only two feet of water can float a vehicle and as the roadway may not be intact under water, it should only be crossed at a bridge.

Sincerely, Richard A. Wood Tucson, Arizona

Dear Mrs. Brooks:

I am a member of the German Cactus Society (DKG). Recently I joined Arizona Cactus and Succulent Research Inc., Bisbee, AZ. In our newsletter of February, Mr. Eppele told us about your new magazine. I am very interested and would like to get a sample copy. How much is the subscription overseas? I will appreciate your answer very much.

I enclosed a color photocopy of a very old postcard (about 1900) from Germany, which is very rare and every cactus collector wants to get the original (which will cost the fortune of \$50.00 a card). So I thought you might like the copy. Enjoy the card.

Thank you very much. Sincerely, Juergen Bosack Niederstetten, Germany Dear Joan:

I simply can't express my delight in the way you have published your first two editions of American Desert. Both issues are fascinating to read and lovely to look at. I am grateful to the Lindsays for putting you in touch with me. My subscription is enclosed. Since we spend summers in Salt Lake City and winters in Coronado I will be worried about receiving them all. I haven't had much luck with subscriptions, but I would hate to miss one of yours.

It was wonderful to see the names of so many old friends who used to write for *Desert Magazine* when I owned it – Harrison Doyle, Glenn and Martha Vargas, etc. We once visited the Vargas's in Baja.

Although my work covered the world after I sold the magazine to write a syndicated travel column out of Los Angeles, my heart remained in the desert. When it was suggested that I write some desert books for Sunbelt Publishers, we could hardly wait to point the van toward Baja and the Colorado Desert. The Baja book is scheduled for publication in the fall of 1993; the other to follow in spring 1994. After my last book, Walks in Oscar Wilde's London (a Quality Paperback selection this past fall), it was marvelous to "come home" again to the desert.

As I told you over the phone, publishing can be the most risky, heartbreaking endeavor in the world, but even at worst, the most rewarding. I have been blessed with marvelous adventures, but the experience and knowledge that came to me through *Desert Magazine* is the grandest, the most sacred, of my life. I wish the same for you.

Very best, Choral Pepper Coronado, California

Books to Read



NAMED IN STONE AND SKY:

An Arizona Anthology

Edited by Gregory McNamee, Reviewed by Kevin Dahl

One of the most outgoing of my high school friends (many years ago) once proclaimed himself "Emperor of Arizona," taking the idea from a historical pretender to the throne of San Francisco during its Gold Rush era. His declaration became a running joke that helped us deal with our feelings of powerlessness as youthful environmentalists (this was just after the first Earth Day) trying to stop freeways, nuclear power plants, dams, off-road vehicle misuse, pesticides and every other threat to the Earth. An Emperor could bypass months of lobbying, study, protests and meetings with a simple edict: "Don't build any more landfills in the riverbed. Starting today, everyone will recycle all their household waste."

Our Emperor and his entourage would survey his domain just about every weekend on backpack trips to the desert canyons and high mountain peaks. In retrospect I see that asserting our own form of sovereignty was a means of staking an emotional claim to the wild lands we loved.

Gregory McNamee's anthology of literature about our Emperor's dominion (the state of Arizona) is an amazing compilation of how other people have put into words what we grew to feel in our hearts about this wonderful place. Named In Stone and Sky, unlike the last Arizona anthology (Mary Boyer's 1935 Arizona in Literature), emphasizes the landscape over the urban experience, and makes a strong argument that the land not only richly informs our literature, but "is the central fact here, the constant that joins the best writing from one generation to the next."

McNamee has gone to all corners of the back forty to round up a wide variety of "literature" - including Native American creation stories, lyrical poetry from Hispanic writers and others, geological reports, and newspaper editorials, as well as the expected historical accounts and fictional vignettes. The writers represented include Edward Abbey, Mary Austin, Charles Bowden, Willa Cather, Zane Grey, Jack Kerouac, Barbara Kingsolver, Joseph Wood Krutch, Aldo Leopold, Henry Miller, Gary Nabhan, and Simon Ortiz. Among these and the other lesser-known authors it is likely you'll be introduced to more than one writer whose books you'll start seeking.

Each contribution is kept brief and has an explanation about its context and author. The small size of the book (less than 200 pages) belies the rich depth and breadth contained within. It will become an essential reference for any student of the state.

In fact, if the Emperor of Arizona ever decides to open a Royal College I suspect Named In Stone and Sky would be on the required reading list. Of course, McNamee and some of the writers he's anthologized here would likely be on the faculty, too.

Published by: University of Arizona Press, Tucson, AZ 85721. 198 pages. Paperback. \$15.95

CACTUS

CACTUS COUNTRY

by Jim and Sue Willoughby Reviewed by Joan Brooks

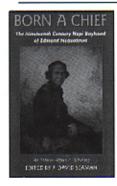
The subtitle of this book is "a friendly introduction to cacti of the southwest deserts" and is just the kind of book you'd love to hand to a friend newly arrived in the desert. It is simply written with drawings

that distinguish one type of cactus from another, and descriptions of plants often mistaken for cactus, such as the ocotillo, the agave, the yucca and the Joshua tree. Not only is it informative, but is generously sprinkled with humorous cartoons which make the plants come alive. The book includes a glossary of terms and a short bibliography for those who wish to know more about cacti. To top it all off, you can even try some of the great recipes, not just for cactus jelly, but even for "nopalitos shish-kabob" and "cactus juice cocktail". A great gift idea! Published by:

Golden West Publishers, Phoenix, AZ 85014.

Autographed copies available if ordered from the authors: Jim and Sue Willoughby, 1407 Sierra Vista Dr., Prescott, AZ 86303.

112 pages; black-and-white drawings. Paperback. Price: \$6.95



BORN A CHIEF:

The
Nineteenth
Century
Hopi Boyhood
of Edmund
Nequatewa as
told to by
Alfred F.
Whiting

Edited by P. David Seaman Reviewed by Cheryl Jeffrey

This story was fascinating, I simply could not put it aside. It describes the life of Edmund Nequatewa of Second Mesa who was born in 1880. This boy was thrust into his destiny because of changes brought on by the disruptive forces of EuroAmerican culture. These stresses were felt strongly by Edmund's family. Their son was chosen to become chief due to a historical tragedy.

The people of the Bear Clan had resisted Spanish rule in the Pueblo Uprising of 1680 and killed many priest and soldiers. There was an

Continued on page 42.

Rocks and Minerals:

by Dr. Stephenie Slahor Photos: Center for Meteorite Studies, Arizona State University.

Visitors From Space!

We enjoy science fiction tales about visitors from planets and places away from Earth, but there are some real visitors from space—meteors and meteorites!

Scientists are not sure where meteors originate. Some think that the Asteroid Belt between Mars and Jupiter may be the source. Others say that comets might help form mete-

ors. But wherever they originate, meteors come toward Earth at the rate of about ten tons of material every day! About 1,000,000 meteors of the brightness of the star Vega enter the atmosphere each day, and about 200,000,000 meteors visible to the eye enter each day. Meteor dust adds about 1,000 tons of weight each day to Earth.

Meteors enter Earth's atmosphere at about eight to twentysix miles per second. Because that is such a fast speed, friction is created resulting in heating the meteor surface to about 6,000 to 7,500 degrees centigrade. That is hot enough to melt away most of the surface of the meteor, turning the surface into vapor in a continuous process of melting and vaporizing as the meteor falls through Earth's atmosphere. We must be thankful for this for without it, the Earth would be filled with craters caused by the meteors when they impacted. Earth would look like the moon.

Once a meteor is on Earth, its name changes to "meteorite" to



Bagdad - Iron meteorite. Medium octahedrete. Found by rockhound near Bagdad, AZ. About the size of a fist.

identify it as a rock.

There are about 90 varieties of meteorites, with a new variety discovered about every two years. Meteorites are usually heavier than Earth rocks of the same size and shape, and many have dents on them which look like thumbprint dents.

A stony meteorite is usually black on the outside and white or gray inside with perhaps some flecks of iron. An iron meteorite is also black on the crust, but shiny on the inside. When etched and polished with acid, an iron meteorite has interesting, angular lines inside called "Widmanstatten patterns."

While meteors can happen at any time, some meteors arrive in annual "showers." At certain times of the year, regular showers occur which seem to radiate from a certain point in the sky. For example, the Orionids in October seem to radiate from the constellation Orion. And sometimes there is a "swarm" of meteorites. That is a rare, but spectacular display of meteors. Some of

history's more recent swarms were in France in 1803, in Poland in 1868 and in Holbrook, Arizona in 1912. Tens of thousands of meteors occurred in those swarms.

Meteors can be seen when they are about 70 miles above the surface of the Earth. Although it might seem that an

extra bright meteor landed very close, most often they land far from where they are seen. It is only when you hear the rumble of it and the sound of its impact that you should think it landed near you. Actually, most of the witnessed falls (when people have actually seen the meteorite land) occurred during the day.

Scientists estimate that a meteor of the brightness of the full moon occurs every few days somewhere over Earth. Most are less bright than that, but still spectacular to see.

Because iron meteorites rust away once they are on Earth, most meteorites have been found where weather is dry such as on the desert or in dry lake or river beds.

If you think you have found a meteorite, compare it to an Earth rock of the same size. The meteorite is usually much heavier. An iron meteorite will sound metallic when tapped with a hammer and it will attract a magnet.

The minerals cohenite and schreibersite are found only in



Henbury - Iron meteorite. Medium octahedrete. From Henbury Crater, Australia. About the size of a fist.

meteorites. -And some meteorites have black diamonds in them.

The American Meteorite Laboratory, P.O. Box 2098, Denver, Colorado 80201, the Center for Meteorite Studies, Arizona State University, Tempe, Arizona 85281, and the Smithsonian Institute's Division of Meteorites, 100 Jefferson Drive SW, Washington, D.C. 20060 will analyze a rock thought to be a meteorite. If it is, they might make an offer to buy it for further study or display. Or the finder can keep it. Meteorites are interesting visitors from space!

Dr. Stephanie Slahor is an attorney and writer in Palm Springs, California.

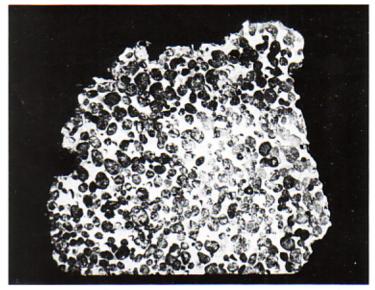
Dr. Nininger, the late meteorite expert noticed, about fifty years ago, that very few meteorites were being found in California. He made an extended trip throughout the state, giving lectures on the subject.

When he reached Southern California, he was told about our lapidary classes and the mineral

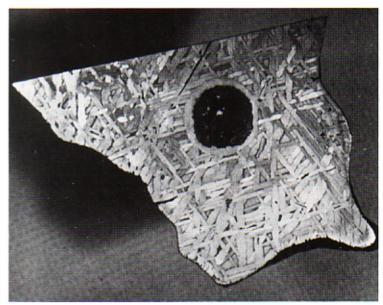
society in conjunction. He came to our lapidary classes first, and asked if he could do some polishing on a meteorite that he had with him. Before class, he asked us to not introduce him until at the end of the class period. He felt that if the students knew who he was, he would be plied with many questions, and might not get much work done.

While he was smoothing the surface of the meteorite he had, a student asked him what it was. When told it was a meteorite, the student replied, "I have a meteorite out in my car." Dr. Nininger, of course, asked him to go and bring it in. As to be expected, it was not a meteorite. Dr. Nininger asked him how he knew that it was a meteorite. The reply was, "I sent it to Dr. Nininger, and he said it is a meteorite".

Glenn Vargas



Springwater - Palasite (stony-iron) metorite found in Saskatchewan. Cut and polished slice. Yellow mineral is olivine.

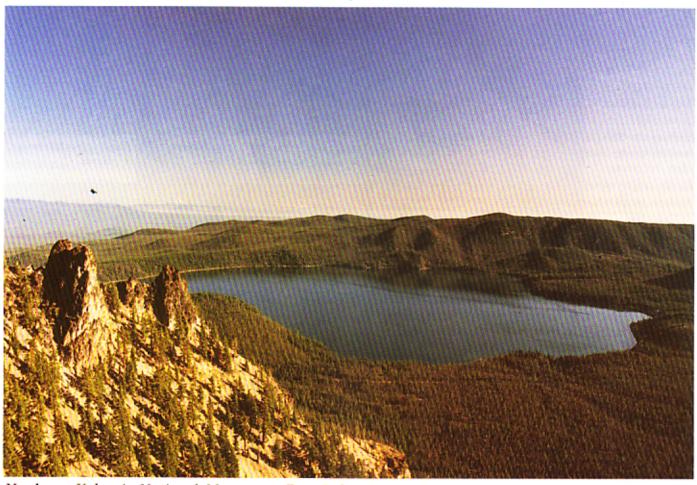


El Sampal - Iron meteorite. Medium octahedrete. Southern Argentina. Main mass 154 kg. Slice shows troilite inclusion.



Thunda - Iron meteorite. Medium octahedrete. Queensland, Australia. Shows beautiful Widmanstatten pattern.

THE OREGON DESERT A Place of History and Adventure!



Newberry Volcanic National Monument, East Lake, Oregon desert.

Most non-Oregonians – and some natives as well – describe the Beaver State in two words: wet and green.

Yet, fully half the state is exactly the opposite – dry and brown. Most of this latter half qualifies as a desert complete with sagebrush, sand dunes and rattlesnakes. This dry portion of Oregon is the northern extension of the Great Basin Desert that stretches southward into Mexico.

The Cascade Mountains split the state in half from east to west. The mountains block the westerly flow of moisture-laden winds from the Pacific Ocean. While the western portion of the state receives up to 70 inches of rain a year; the eastern half makes do with less than twelve.

The bustling town of Bend is a good place to begin your discovery of Oregon's high desert country. Situated in the transition zone between the lush slopes of the Cascades and the dry, parched desert lands, Bend is a pleasant mixture of both worlds.

The desert, with an average elevation of 3,500 feet, receives more solar radiation than lower areas. This increased radiation translates into a climate that is both sunnier and drier than the rest of the state. In fact, some areas in the desert rarely get

more than six inches of moisture in a year.

The geologic legacy from million of years of volcanic activity is vividly displayed throughout the area. Cinder cones and lava fields dotting this sandblasted country are the end products of a process begun deep in the searing crucible of the earth's interior.

Starting about 70 million years ago volcanos belched their acrid mixture of ash and lava and blanketed the state. More recently, Mount Mazama – now Crater Lake National Park – Newberry Crater and hundreds of smaller volcanoes vented their fury to produce the near-moon-



Homestead cabin, Oregon high desert.

scape areas that are visible throughout the eastern portion of the state. Newberry Crater was recently designated Newberry Volcanic National Monument and joins the other national jewels in the crown of outstanding scenic, natural wonders.

This volcanic legacy, along with the mountain building of the Cascade Range which blocked moist air from the ocean, gives an arid quality to the land. Seething vents in the earth's crust sent billowing clouds of gas and dust high into the fiery skies. This dust eventually settled over the land and contributed to the dry, sandy soil so prevalent on the leeward side of the Cascades.

During this period of active volcanoes, hundreds of cubic miles of molten rock flowed like sticky oatmeal over a vast area. The lava oozed from fissures in the ground much like toothpaste squeezed from a gigantic tube. When the fiery rock cooled and hardened, it left pressure ridges,

depressions, underground caverns; a tortured topography that even today, defies all but the most ardent explorers.

One of these explorers is geologist Larry Chitwood of the U.S. Forest Service in Bend. Chitwood has tramped the dusty hills of the desert searching for the many geologic secrets that lie hidden in this arid environment. Chitwood notes: "It's a real puzzle that continues to challenge geologists from near and far." He has published several reports that explain many of these mysteries but many more are yet to be unearthed.

Early paleolithic hunters roamed these barren lands but left little trace. They were true nomads and migrated throughout the desert following herds of large animals that flourished at the end of the ice-age some 12,000 years ago.

As the climate changed and the large mammals disappeared, the nomadic people adapted by changing their diet to include more seeds, grains and other vegetation. Little is known of their habits since they had no written language and left precious few artifacts to explain how they lived in this rugged land. They did, however, leave some tantalizing clues as to their lifestyle.

Sagebrush sandals, dated at over 9,000 years old, were discovered in the caves near Bend as were obsidian arrow points, rock tools and some evidence of semi-permanent dwellings.

Other clues are less conspicuous. Glance around and, if you're fortunate, you'll see examples of their art work painted on the smooth faces of once molten rock. These pictographs are difficult to find and have been vandalized so their interpretation is lost forever. Scant research has been done on these desert cultures and remains a low priority due to funding constraints and the fact that other





Sand dunes, Oregon high desert

cultures are perceived more worthy of serious study.

The first Europeans to enter the region were fur trappers who passed through in the early 1800s. They sought beaver, otter and other fur-bearing animals for the lucrative trade in Europe and the recently-opened Orient.

Most of the trappers left the

area without finding a rich supply of animals. Soon, trade shifted northward into unexplored parts of what is now Canada and continued to feed the pelt merchants throughout the world.

The trappers did, however, leave faint traces of their passage through the dry lands: rock cairns, old axe blazes on trees, and - when the wind is just

right - their voices echoing down the lonely canyons.

Ranchers were the next wave of people to visit the land. They settled and established domain over millions of acres and treated this mostly public land as their private estates. These cattle barons prospered for a time but eventually their herds severely overgrazed the abundant, wild bunchgrass that grew on the range. To this day, the range has yet to recover from the clovenhooved invasion.

Sheep herders came next and for many years battled the cattle ranchers for control over grazing rights to the verdant lands. These range wars continued well into this century until Congress passed laws to regulate the number of animals that grazed the public domain.

Along with the laws limiting the number of livestock, fences were erected to mark boundaries of individual grazing allotments. Gone forever was the open range that cattle and sheep owners fought and sometimes died over.

After the turn of the century, laws were passed to facilitate the disposition of much of the public lands in the west. Preceding these revised homestead laws, most settlement occurred on the more fertile areas such as the green, lush valleys of western Oregon.

With wave after wave of settlers in search of free land, the choice parcels were quickly gobbled up. Homesteaders then began to look at the less productive areas in the eastern portion of the state to fulfill their own dreams of manifest destiny.

These latter-day settlers found wide-open vistas but also bonedry soil and a fierce climate. They established half-section (320 acre) homesteads and attempted to "prove up" their land. The requirements included living on

the land for six months and making certain improvements within five years.

During this period, unusually wet years allowed crops to be grown. Sagebrush was grubbed out, rocks cleared and seed sown. Beginning around 1915, the climate returned to normal and crops withered in the parched soil.

The return to drier years coupled with a short growing season – often fewer than 50 frost-free days per year – signaled the end of yet another attempt to tame this harsh land.

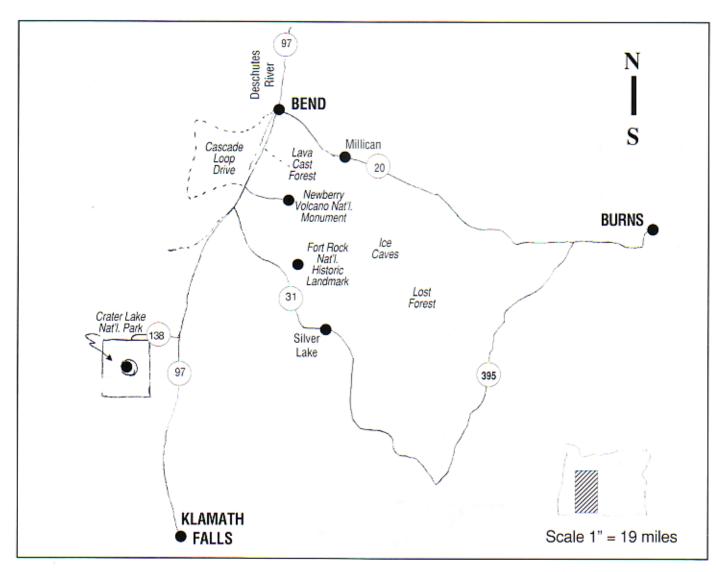
What became of these hearty homesteaders? Most returned to their former homes in the east or drifted over the Cascades into western Oregon where the land was more forgiving.

The history of the desert is filled with human stories both sad and happy. It is a land rich in lore and full of broken hearts and dreams.

Ray Hatton, geography professor at Central Oregon Community College in Bend has spent over two decades recording the history – both written and oral – of the homestead period. . . . "the stories fade with age as the people die off," noted Hatton. "It's important to chronicle the people and events of this exciting era of Oregon before it vanishes."

Homesteaders who came west to claim their 320 acres arrived with high hopes and grand visions. They had left the crowded cities of the east to gamble on the chance to gain a foothold in the desert. They believed the advertisements that boasted of "bountiful crops with 60 or more

Continued on page 18.



MY FIVE FAVORITE DESERT BOOKS

These were the only two submissions for the "Five Favorite Desert Books" contest published in the November/December issue. The prize goes to J.C. Moore, but the second author, Jeff Chambers offers some interesting alternatives. A few of these books are out of print and may be hard to find but they sound inviting. Perhaps our readers would like to comment on these choices or offer their own selections in a letter to the editor.

Five Favorite Desert Books by J.C. Moore, Jr.

- 1. The Desert Year, Joseph Wood Krutch
- 2. Desert Solitaire, Edward Abbey
- 3. Scenes in America Deserta, Reyner Banham
- 4. Sonoran Desert Summer, John Alcock
- 5. California Desert Trails, J. Smeaton Chase

These five books have one thing in common: each is written by a man with a strong emotional response to the desert and the ability to touch the spiritual chord in all of us desert lovers that goes beyond natural history and scenic descriptions.

The earliest writer, Chase, a visiting Englishman, writes of a solo trip on horseback around the Colorado desert and adjoining parts of the Mohave in the early part of the century. We see this country before it is overrun with contemporaries; the few people we encounter are in isolated mining camps. Chase makes it from one water source to another, never quite sure whether he will find the next one.

Another Englishman, Banham, is an art historian who is captured by the spirit of the desert. He travels by standard passenger cars rented from Hertz and Avis. He takes them places that few of us would try with 4-wheel drive vehicles. He offers new insights-for example, he argues that the best way to see the desert is not on foot or horseback, but by car. His reason: you can better grasp the immensity when you move more rapidly across the landscape from one basin to another.

Krutch, a retired drama critic, and Alcock, a biologist, both deal with closely observed details of the natural history of the Arizona portion of the Sonora desert, but in the framework of a philosophical point of view.

Abbey speaks to the part of every desert lover who wishes the entire desert was off limits to everyone but him. Five Favorite Desert Books by Jeff Chambers

Five favorite desert books, what an excellent idea. Though it took a few minutes thinking to put them in order (no one ever bothered to ask before) here goes number one:

- White Heart of Mohave, Edna Brush Perkins, 1922.
 A story about two middle age women (their own words) arrive in California determined to explore the desert. They decide a trip to Death Valley would be the ultimate experience. From the planning stages to the descent into the valley, it is an exciting story. Also, there are enough landmarks mentioned to make the route easily traceable to this day.
- 2. Deep Enough, Frank A. Crampton, 1957. Mr. Crampton gives a personal account of visits to camps and towns located along the California, Nevada, Arizona borders during the early part of this century. One of my favorites because as I read it I realized I have explored many of the same spots myself so it was easy for me to visualize the places mentioned, though most are ghosts now.

 3. Desert Challenge, Richard G. Lillard, 1942. This
- is a book exclusively on Nevada. It's not only a history but could have and still can be used as a guide book. Mr. Lillard gives his own thoughts about what was going on in the state of Nevada in 1942, particularly Reno and Las Vegas and as many of the camps had only been in decline a few years, he gives a current condition (1942) of many of them.
- 4. Roads to Roam, Hoffman Birney, 1930. Books written first-hand about experiences in the desert are the most enjoyable to me and this book is no exception. It is an exciting story of a young man's journey by auto through the Southwest. The trip takes place during the early twenties and is told in a lighthearted way as if Mr. Birney were telling a group of good friends. Though most of the trip takes place in Arizona and Utah, the author also ventures into California and Nevada. This book is always a reminder to me of how tough travel in the desert used to be.
- 5. Death Valley & The Amargosa, Richard E. Lingenfelter, 1986. As Death Valley and the surrounding region is of great interest to me, Mr. Lingenfelter's book is unsurpassed for it's detailed history facts and figures covering even the smallest events. An excellent reference book.

Well there's my five. Thanks for asking.

....ON THE DESERT

Don't be Spineless: Try Cooking with Cactus

by David Eppele

© Arizona Cactus

Spineless and nearly spineless varieties of prickly pear cactus have been a source of food to natives of the Americas for thousands of years. Among Spanish speaking peoples, they're called nopalitos.

Every "fruteria" or fruit and vegetable store in

Mexico, Central and South America sell the young, tender pads of cactus. For the "do it your selfer", one may purchase the complete pads, scrape them with a knife, then wash and dice them.

They are also available fully cleaned and ready to blanch. Blanching is necessary in order to remove the mucilaginous juice of the plant. It is much like the juice of okra. After blanching for five minutes or so, put the diced cactus into a colander and drain them. Rinse with cold water. Now you're ready to do some "Cactus Cooking".

What do nopalitos taste like? Many say they are as good as any green bean you'll ever eat. Others compare them to artichoke hearts, or young asparagus.

I recently delivered a lecture to the Cactus and Succulent Society of Santa Barbara, California. Since the presentation is fairly lengthy, I take a break in the middle and serve some food or drink made from cactus.

Each show is different-has to be-because each audience is different. Santa Barbara was no exception. There were video cameras hanging from the rafters! I was wired with so many microphones I thought I was a licorice tree!

The local NBC affiliate shot film for the news department. I hammed it up for them. Gave them shots of a certified "cactomaniac" chomping on a cleaned cactus pad. Then shots of a special dish I prepared for them . . . a salad made from nopalitos. I know you're dying to try this recipe: (See insert).

My old standby recipe for nopalitos is an easy one. Clean the young tender pads and blanch them. While this is going on, cut up some bacon and a large onion. Saute the bacon and onion. Drain well. Remove the nopalitos from the stove and wash them in a colander.

Add the bacon and onion to the nopalitos, stir and steam for about five minutes. Salt, pepper, garlic salt and oregano are now added. That's it.

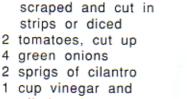
> Real cowboys and cowgirls cover this with red chili salsa and dig in!

> A few years back, we were all sitting around trying to come up with some farout and totally radical recipes for nopalitos. I hit upon this one: Prepare a halfdozen pads of prickly pear cactus. You know, clean and blanch them. Then make up some simple syrup. This is a super-saturated mixture of sugar and water, brought to a low boil on the stove. Now pour the syrup mixture over the diced cactus. Go to your favorite ice cream store and buy a gallon of vanilla ice cream. Let it soften and

put it into a big mixing bowl. Stir in the sugared nopalitos and refreeze everything. The resulting crunchy cactus-ice cream will bring smiles to the faces of every desert rat west of the Mississippi!

Tortilla Press, the publishing arm of Arizona Cactus, plans to publish a cactus cookbook with oodles of recipes using desert plants. It's due out in 1993.

Bon appetit and Feliz Nopalitos! duta



4 or 5 (1lb.) nopalitos,

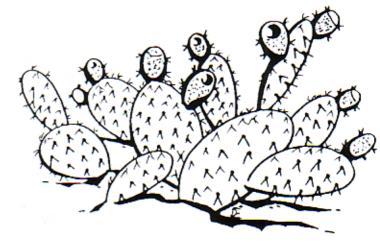
1 cup vinegar and oil dressing

1/2 tsp. of oregano salt and pepper to taste.

Steam the nopalitos in lightly salted water. You may want to add a half-cup of chopped onions. Drain and chill. Make up your favorite oil and vinegar dressing, or buy a bottle of Paul what's his name's dressing.

Ensalada de Nopalitos

Combine with tomatoes, onions, cilantro, oregano and dressing. Add salt and pepper to taste. Serves three to four.



Desert Rabbits

By P.M. Smiley Photos by the author



Desert cottontail.

Desert rabbits are some of the most common and easily recognizable desert mammals. There are two families, true rabbits and hares. True rabbits include all species of cottontail rabbits, the brush and Pygmy rabbits. Hares include all species of jackrabbits. All rabbits and hares are herbivores, plant eaters. Rabbits and hares have enlarged ears and rear legs, they are fast runners with the ability to change direction quickly and often. They may "freeze" when threatened and tend to blend into their surroundings. Both rabbits and hares have large eves, set on the sides of the head. This gives them a wide field of vision to detect danger. They have a great sense of smell and acute hearing. They are prolific breeders and sometimes very abundant.

In the American deserts there are a few species of rabbits that inhabit small areas and are not widely distributed. These include Nuttall's cottontail found in areas of the Great Basin desert and portions of the Mojave desert. The Brush rabbit found along the



Black-tailed jackrabbit.

western edge of the Mojave and Colorado deserts. The Pygmy rabbit is found in the sagebrush areas of the Great Basin desert and the White-tailed jackrabbit in the northern parts of the Great Basin desert. The Antelope jackrabbit is found only in a small part of the Sonoran desert of southern Arizona. This article will be about the two most common and widespread species, the Desert cottontail (Sylvilagus

audubonii) and the Black-tailed jackrabbit (Lepus californicus). Both are found in all North American deserts.

The desert cottontail is a true rabbit. The adult size is about fourteen inches long and may weigh around four pounds. It has short, light-colored, brownish gray fur. The ears and hind feet are sparsely furred. It has a white-tufted tail. It has noticeable shorter ears and rear legs

than the black-tailed jackrabbit. It can run approximately twenty miles per hour and often runs in a zig-zag pattern. It seems to prefer to stay near plant cover or rock outcrops for protection against predators.

Desert cottontails are also found in and around dense thickets of mesquite and often the rabbits will dig burrows for themselves in the sandy soil. The thorny mesquite plants are used for shelter and the shade they produce reduces the heat from the direct sunlight. Sometimes many individual rabbits are seen foraging near the outer edges of the mesquite patches. Cottontails will drink from standing water, but apparently are able to satisfy their water needs from eating mesquite leaves and seed pods and other annual plants when available. During drought conditions they will forage on the fleshy parts of cactus and the bark of desert shrubs and trees. Cottontails will also eat grasses, fruit and can be garden pests. They are usually nocturnal, active at night, although they are sometimes crepuscular or active at dawn and again at dusk. They may also be active during the day during winter or on overcast days.

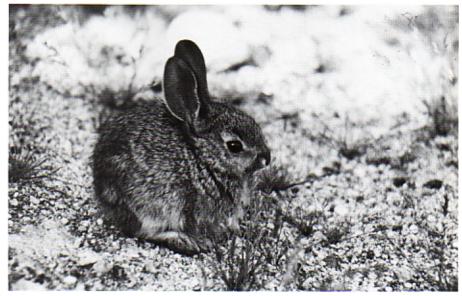
Cottontails will mate and reproduce throughout the year during favorable conditions, or when these conditions are enhanced by abundant food supplies. They will also breed all year long when they live on irrigated land. The male cottontails do not play a role after mating. The female, after mating and about a week before birth of the young, will make a nest. The nest can be located in a number of places. The female may dig a burrow, use the burrow of another animal, or the shelter of thick brush and rock outcrops. The nest is fur-lined, often mixed with soft, dead, dry grasses. The female bites off her fur from areas of the breast and belly, accomplishing two things, material for the nest and exposing the nipples for the young

rabbits to nurse. Gestation is about a month from the time of mating and anywhere from one to six young are born. The cottontail being a true rabbit has altricial young, meaning the young are born naked with the eyes closed and completely helpless. It may take up to ten days before the young start to move around inside the nest. Female cottontails are not very attentive mothers and may only nurse the young once a day. After about two weeks the young are weaned and will leave the nest. The young will reach sexual maturity in under three months. A female may mate and have up to six litters and thirty young a year. This may seem like an enormous number of young, but remember very few reach maturity and many will become food for predators.

The life expectancy for any

quickly running for cover, or hiding in rock outcrops. With so many predators after them we can see why the large reproductive activity is critical to their survival.

Cousin of the cottontail, and probably the most recognized of the desert rabbits is the Blacktailed jackrabbit, it is actually a First named the jackass hare. rabbit due to the long ears, at some point it was shortened to jackrabbit. A large hare, it is from eighteen to twenty-five inches long, it's ears are six to seven inches long and it weighs from four to eight pounds. It is grayish-brown on top with sandy colored sides. The underside is white. The ears have black tips and there is a black stripe on the top of the tail that runs from the tip, to the rump. Jackrabbits can run about thirty to thirty-five miles per hour, with hops of five to ten



Young desert cottontail.

cottontail is about two years. A large and diverse group of predators use cottontails for their main source of food. Large gopher snakes and rattlesnakes will eat young rabbits. Hawks, eagles and owls will eat both young and adults. Foxes, bobcats, dogs and coyotes will also eat rabbits. Many rabbits are killed by cars when they run across roads and these are consumed by ravens and vultures. Cottontails usually will attempt to elude predators by

feet and when alarmed the hop may extend to twenty feet. When running at a slower speed, every fourth or fifth leap will be higher in the air to better see it's surroundings. When running at top speed the jackrabbit will not jump and will lay back its ears to cut wind resistance.

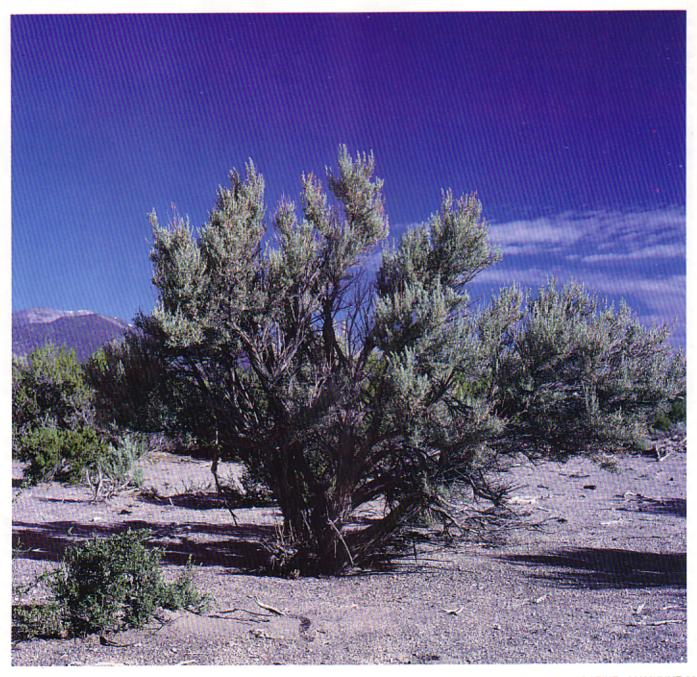
Jackrabbits inhabit more open country than their cousins the cottontails, but may be found in a variety of habitats from below Continued on page 18.

Desert by Katherine Barrows Photo: James W. Cornett, Palm Springs Desert Museum.

Great Basin Sagebrush is an Indian Drugstore

cross the vast plains of the Great Basin Desert, there is no plant more common than the sagebrush. If you have visited this land of basin and range, you have seen the seas of gray-green Artemisia tridentata, variously known as basin sagebrush, three-toothed sagebrush or simply big sagebrush. From the plains of Utah and Nevada, where it is the state flower, through eastern Oregon, southern Idaho and Montana, reaching into the desert slopes of southeastern California and even at higher elevations in the Sierra Juarez of Baja California, basin sagebrush is symbolic of this high desert country.

Indeed, writers of the old west including Zane Grey, and many a western movie, have done much to enhance Artemisia's



reputation as the most common shrub of the American deserts. Yet students of deserts know that basin sagebrush is dominant only in the Great Basin Desert, supplanted in the Mojave and Sonoran deserts by the equally ubiquitous creosote bush.

Perhaps most recognized by its strong sage-like smell, basin sagebrush is also identified by its silvery, slender leaves bearing three short teeth at the tips. With grey-brown shredded bark, basin sagebrush plants are highly variable, ranging in height from knee-high to chest-high, sometimes nearly tree size, depending on conditions of the soil and the influences of wind, cold, and snow. In the late summer and fall, the many small flowers crowd the long branches in a subtle show of yellow. The flowers are the best clue to the family ties of basin sagebrush, which is not a true sage (in the mint family) but a member of the sunflower family in the wormweed or mayweed tribe. And like the mayweeds, the pollen of basin sagebrush may bring on wheezing and sneezing.

The sweet pungent odor, especially pleasant after a rain, is not universally admired either. To early travelers and Mexican miners it was chamiso hediondo, or stinking greasewood, and to some its odor is best described as turpentine-like and sickening. Though often maligned for its odor, basin sagebrush has been widely used for medicinal, ritual, and even edible uses.

Many a frontier fire was enriched by the sweetly pungent smoke of sagebrush wood. In the sauna and sweat lodge, sagebrush leaves and wood smoking over coals were used to clear the air of pestilence and spirits of the dead, for ritual purification. A literal purification may have occurred as well; sagebrush aromatics released in burning possess anti-microbial properties.

Over much of the great plains where it is common, basin sagebrush is an important browse

plant for cattle, pronghorn, sheep and deer. It is the favored food of the Sage Grouse (centrocercus urophasianus), which in winter subsists almost entirely on sagebrush leaves. However, the leaves of basin sagebrush, despite their sagey smell, have not been widely used by humans as a seasoning or food, for they are said to have a bitter and disagreeable taste. Nevertheless, the Ute Indians of the southwest are said to have used them as part of a pemmican-like dried meat and berry food.

The small seeds were favored, though, by Native Americans, the Cahuilla Indians among them. In the fall seeds were gathered in large quantities, using beating paddles and baskets, and ground for use as a flour or meal.

A tea from the bitter leaves of basin sagebrush was taken as a curative for colds, influenza, and fevers. Cahuilla women made a strong tea to use as a treatment for sore eyes, stomach distress, an antiseptic for wounds, and as a fragrant hair tonic that is said to be quite pleasant. The Tewa Indians ate the leaves to remedy coughs and difficult expectoration. The Paiute Indians of the Great Basin, and the prehistoric Anasazis, applied a poultice of sagebrush leaves to relieve toothaches, spasms, and muscle pain.

The powdered leaves, gathered from favored areas in the spring and summer, have a long history of usage by Native Americans for diaper rash and chafing skin. The fresh leaves of basin sagebrush and other Artemesias (artemisia californica and artemisia ludoviciana) were also used in bedrolls to ward off "bed-bugs." The fresh or dried leaves were layered over and between stored berries and root foods to preserve and protect them from bugs and rodents.

Treasured by Native Americans throughout its range, the aromatic basin sagebrush also figures prominently in lives of

many other desert dwellers, birds large and small, small mammals, and insects. Tramping through the sagebrush covered plains of the Great Basin Desert, you might delight to the sweet songs of the black-throated sparrow and secretive gray vireo; both make their nests among the abundant foliage of basin sagebrush. Whether you're in the sagebrush country of northeastern California and eastern Oregon and Washington in summer, or in the southern California deserts in fall, you might detect the nervously flipping tail of the sage sparrow, which feeds on the seeds of the sagebrush and often makes its nest there. The tiny Costa's hummingbird is also known to attach its neatly woven nest to the branches of a basin sagebrush. The sage thrasher, relative of our neighborhood mockingbirds, is also locally abundant in sagebrush country.

Like the sage grouse, the Pygmy rabbit (sylvilagus idahoensis) has developed a taste for the bitter leaves of basin sagebrush, feeding on this plant throughout the year. Dwelling amidst the dense foliage of this aromatic shrub is the sagebrush vole (lagurus curtatus) which feeds on the inner bark and leaves. And if you stop to examine the stems of basin sagebrush, you might observe a velvety, spongy, and purple-tinged growth, an insect gall from the sagebrush gall-midge. After the eggs of this small fly are laid on the stems or leaves, the sagebrush is stimulated to produce the swollen gall, which provides a secure home for the developing larva and pupa.

At first monotonous and uniformly grey-green, the expanses of basin sagebrush in the Great Basin Desert have been a rich source of food, medicine, and renewal to desert dwellers through the ages. Truly, a diverse community of life, and a diversity of uses, can be found in the strongly-scented foliage of basin sagebrush.

Desert Rabbits, Continued from page 15.

sea level to about 12,000 foot elevation. By standing out, jackrabbits may seem very abundant, but they are usually widely spaced. Their populations are rarely as dense as cottontails. Jackrabbits will feed on many types of plants and grasses and on cactus when times are hard. They feed mostly at night, early morning and evening. It is interesting that jackrabbits produce two type of fecal pellets. The hard waste pellet that we see while walking in the desert and a soft one that the rabbit reeats. This is done while at rest and it is thought that the jackrabbit receives some kind of vitamin nutrition from it. The heat of the day is spent resting, usually in a "form". The form is a selfconstructed, shallow depression of bare earth, about one inch deep and under a dense bush. Forms that I have found seem to always face north or north-east. Jackrabbits rest in the form, that also shelters them from the heat of the day. This helps them to conserve water and lower their body temperature. Jackrabbits have no sweat glands. They can pant to lower their temperature, but this has a high cost in loss of body water. Another means of lowering body temperature is through their long ears. ears are filled with blood vessels and as the rabbit pumps blood through them they are cooled. While in the form the jackrabbit will also lay with as much of it's body touching the slightly cooler soil as possible.

Jackrabbits will drink from standing water, but most never see any standing water and must get their needs from the plants they eat. When plants are abundant, jackrabbits will breed during almost anytime of the year. After a gestation period of about six weeks the female will give birth to a litter of one to eight young, with two to four being average. A year old female can give birth to about four litters a year. Jackrabbits being hares

give birth to precocial young, young that are born fully furred, eyes open and able to move about almost immediately. The female makes no nest, but may use a form to shelter the young. They are on their own as soon as they are weaned which takes three to four weeks.

Cottontails and jackrabbits often share the same habitat, with each species finding it's own place. The cottontail in brush covered, rocky areas and jackrabbits in the more open desert. The same predators will eat them both, but jackrabbits will usually try to outrun their predators, instead of hiding in cover. Both of these creatures have interesting and exciting life histories. Next time you're out for a drive or walk look for them, as they speed off just ahead of you. dixi

The Oregon Desert, Continued from page 11. bushels of wheat and rye per acre."

Rumors of a railroad connecting scattered, desert towns along with talk of irrigation from nearby mountain lakes proved to be just that – rumors.

What these early 20th century pioneers found was: hand-dug wells – some over a hundred feet deep – going dry after only a few years, killing frosts that struck even in July or August, below-zero winters, and back-breaking work for the entire family. The hopes of establishing a desert "Garden of Eden" vanished as easily as the light, thin soil in an early spring windstorm.

Today, only a handful of ranch-

are the Indians, fur trappers, cattle barons, and homesteaders. What remains are mostly corporate ranching enterprises. These huge spreads are likely to be owned by a Japanese conglomerate, a New York-based life insurance company or a multi-national group of investors. The romance of the desert has, for the most part, been replaced by the bottom line in an accountant's ledger. No longer do the sounds of a prehistoric native chipping out arrowheads or the creak of a hand-made plow biting into

ers are to be found on the lonely

plains of the Oregon desert. Gone

the high desert.

The people who attempted to wrest a living from this parched, high desert were hardy folks but lacked the understanding of the geography or geology necessary to stay and prosper in such an inhospitable climate.

the sandy soil echo across the

vast ancient lake beds that dot

The soul of the desert has been transformed.

But if you listen to the wind sighing through the twisted juniper trees on a warm summer evening, you may hear a sound that brings a primitive chill up you spine. Listen closely and you may catch a phrase from a long-forgotten time when groups of rugged individualists tried in vain to tame this wild country.

They have vanished in the dust, but their voices can still be heard when the moon is just right and the dying embers of a sagebrush campfire cast flickering shadows across a wall of volcanic rock. Listen – they call to those who hear with their hearts as well as their ears.

The desert guards its secrets well. Be ready for adventure when you strike out across its harsh skin of sand and rock. Be prepared for a journey of the mind as well as the body. The secrets can be learned but only by those who search carefully. Be patient, and nourish your soul in the dry, dust of the desert.

Patrick Pilcher freelances for regional and national publications.





can be obtained for \$5.00 per issue as available. CALL: (619) 329-7762 Ithough she lived her first forty-two years on the eastern seaboard, most notably the Lake George, New York region, Georgia O'Keeffe knew at once she'd found her spiritual home when she arrived in Taos, New Mexico. Surrounded by semi-arid desert, Taos exhilarated her with its silence, the vastness of its sky, the towering peaks.

New Mexico is a variety, a dichotomy. Diverse altitudes start at several thousand feet and reach to fourteen thousand. Vegetation ranges from Sonoran cacti to alpine wildflowers. The air is thin, dry, sweet and sage-scented. There is a vast display of geological formations, from snow-capped peaks to hot springs.

It has been said, most notably by D.H. Lawrence, that the New Mexican sunlight, which is more magnificent than at sea level, makes people feel as if their eyes are open for the first time. Some liken it to a spiritual awakening. For O'Keeffe, it was a startling revelation. She would hike miles every day, collecting bones, colorful rocks and other desert debris.

Not prone to verbosity, she always had something of importance to say. In this way, she was one with the area, the Indians, the hush of the desert. Feeling more alive than she had in years, New Mexico affected her profoundly; it was a rebirthing. Infatuated, she developed a passion for nature, for the surrounding aesthetics. The desert agreed with her essence - simple, unadorned, no pretentiousness. It spoke to her. A loner in a land of vast emptiness and wide-open spaces, she totally immersed herself, exploring lonely back canyons by day while meditating at sunset. This was love forevermore.

Married to photographer Alfred Stieglitz, who was almost twice her age, she was prone to adventure as he was not. Hence, her fascination with New Mexico only frightened him. Although her husband disapproved of her

O'Keeffe In New Mexico

by Diane Robertson

"I have wanted to paint the desert and I haven't known how. I always think that I can not stay with it long enough. So I brought home the bleached bones as my symbol of the desert. To me they are as beautiful as anything I know ... the bones seem to cut sharply to the center of something that is keenly alive on the desert even tho' it is vast and empty and untouchable – and knows no kindness with all its beauty."

May-to-August sojourns, she ventured forth anyway, leaving him in Lake George. Had the desert replaced him?

At the time O'Keeffe first journeyed to Taos in 1929, it was an artists' colony; an escape from bourgeois America. Eventually, Taos became too crowded for her. It was then she first heard of Ghost Ranch, not far from Espanola. When first experiencing the splendor of the ranch in 1934, she knew intuitively she would live there. For six years she rented an isolated ranch where the variegated beauty of the red hills inspired many happy hours of painting. O'Keeffe, who gained notoriety in her earlier Lake George days for her sensuous and provocative floral paintings, now began her "Bones" period. "What was she doing collecting all those old animal skulls?", people remarked. Yet she created wonderful arrangements, hence mystical works of art. "These 'Bones' portray something that is alive in the midst of all that is untouchable," was her comment.

The New Mexico period paintings took on a "daring nature," according to Stieglitz, "a new inspiration." Some reviewers called her themes "too garish" but if O'Keeffe read their comments, she was not dissuaded by them. Hers was such a strong character that she remained true to her feelings alone.

Because of Stieglitz' displeasure with her travels, she was torn between Lake George and Taos. Gradually Lake George became muggy, claustrophobic and too all-consuming green in her mind. As years passed, she spent more and more time in the desert. Finally purchasing her beloved Ghost Ranch house in 1940, she had now made a commitment to the land. In 1945, she bought a dilapidated old house in the village of Abiquiu and proceeded to renovate This is where she would Her passion, however, remained Ghost Ranch. "I work in Abiquiu but I do my living at Ghost Ranch," she told people.

Stieglitz died in 1946, and she took several years to slowly put his affairs in order. After doing so, she made one last journey to her beloved New Mexico, where she would stay until her death in 1986, at the age of 98.

Diane Robertson is a free-lance writer who lives in Idyllwild, California.

Horse

by John M. Swisher Reprinted from "Mojave County Advocate."



Thomas Long Smith, better known as "Pegleg Smith" was a seasoned mountain man and an expected horse thief.

Zigzagging across the vast expanse of the Great Mojave Desert, darting from spring to distant water holes to quell their nagging thirst, horse thieves of 160 years ago were employed in a highly rewarding occupation. Two men are credited with being the leaders of as despoiling a group of outlaws ever to ride west. These men of the 1830s were extremely dangerous and deadly, while raiding large and small ranches from San Diego to Palos Verdes and into central California.

Thomas Long Smith, better known as "Pegleg Smith", was born in Kentucky in 1801. Never a gentle lad, he ran away from home when young. By the age of 25 he was a seasoned Mountain Man. Visiting California in 1826, Thomas became fascinated with the fine horses and mules he saw loosely guarded. Returning

to Wyoming to trap beaver, an Indian's bullet shattered his left leg. Alone and suffering gangrene, Smith amputated his leg. As a result of this show of courage, the Ute Indians adopted him into their tribe. He recovered and became a Squaw Man, having married several Indian women. A self-made wooden leg kept Smith mobile, but ill equipped to endure the rigors of a trap line.

In 1829 he met with others of his ilk and engaged in preparations for looting California ranchos of their many valuable horses. Utes also joined this gang of fifteen, mostly white men. One of them, a black man, later became chief of a Ute tribe. They ventured west on the Spanish Caravan route. Banished from Los Angeles for conduct even worse than the usual hell raising

underworld vaqueros, this family fanned out, agreeing to meet later at the mouth of the Cajon Pass, California, near Devore, with whatever horses and mules they could commandeer. This first recorded horse theft raid netted 400 fine horses which the rustlers herded up the Cajon Pass through Cleghorn and Little Horse Thief Canyons (Summit Valley), and across Apple Valley to Rabbit Springs in Lucerne Valley. This well thought-out route afforded excellent ambuscade sites should the herd be followed, and ample water for the animals' needs.

Willis Wells in the Rodman Mountain area became the next watering stop, followed by Fish Ponds, east of Barstow, Coyote Hole, Bitter Springs (Camp Irwin), Salt Springs, near Tecopa, Resting Springs and on to Las Vegas where grassy meadows offered rest and forage, prior to the last trek to St. George, Utah.

In 1830 and 183¶ Smith returned to California continuing these infamous raids. By 1833 he was busy pilfering stock as far north as San Luis Obispo. Legend suggests that he or members of his gang raided the mission at Santa Clara.

Not all horse thieves escaped unharmed. Californianos, owners of the horses, kept busy executing suspected thieves, while other ranchers pursued their stolen horses and those responsible as far as the Amargosa River near Death Valley's southern fringe. Smith's alleged final raid occurred in 1842, at a time when nearly all of the finest horses had disappeared from the California scene. He died in San Francisco at the age of 65 years and 5 days. According to the book Mohahve IV, published by the Mohahve Historical Society, most of Pegleg Smith is buried in Daly City, California, while one foot rests in peace somewhere in Wvoming.

Known as "Walker's Trail" by pioneer Americans, this route of the Old Spanish Caravans was so named for Ute Indian Chief "Wak". was also known as Walkara. Hawk of the Mountains. His Americanized name was Walker. Chief Wak and Pegleg Smith became partners in horse thievery during 1828. Their raiding parties have been credited as the biggest and best organized ever to operate within the Utah, Wyoming and California triangle. Chief Wak also added to his treasury by extracting payments from the famous Santa Fe Caravan; valuables he could use in trading, which assured the caravans peaceful passing through Ute territory. The Chief, usually accompanied by 30 warriors,

joined Pegleg in forays, or he would lead separate raids himself. Pursued often, in one 3000-head drive across the Mojave Desert, some 1500 animals were lost or died as the raiders failed to stop and refresh their cache of stolen equines.

Dust from the movement of this several thousand drove was seen from 30 miles away. Not all of these horses reached Utah. Some strayed into adjacent land and canyons where they thrived and multiplied.

Large groupings of wild horses, descendants of the proceeds from the ranchos' raids that escaped along the trail, remained in Hesperia and Apple Valley. The last of these wild rangeland mustangs were killed in 1948 shot by men much more brutal than the original horse thieves; butchered down from low flying aircraft in order to secure meat for a mink farm at Big Bear Lake.

In Indian terms, three horses would purchase a comely wife: any horse or mule represented wealth as good as gold. Most of these ill gotten mounts were sold in the Western and Southwestern states to immigrants on a no-questions-asked basis. Chief Walkara continued to purloin horses and mules. and crossing the Mojave Desert long after his one legged side kick, Pegleg, retired from such operations. The Chief reportedly died peacefully of natural causes in 1855. His passing ended major Ute type raiding parties for all times. deapy

John Swisher is a historical writer who is active in the Mohahve Historical Society and currently regional vice president of the Conference of California Historical Societies. He lives in Hesperia, California.

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HOME, HOME OFF THE RANGE



Burros cannot be herded like horses. A helicopter is used to locate and guide the burros near the wranglers, who rope and guide them to nearby temporary corrals, where they are loaded into trucks and transported to BLM's permanent corral facilities near Ridgecrest and prepared for adoption.

here are probably very few Americans who haven't sung or hummed "Home On The Range," even if they were city dwellers! But for America's wild horses and burros, it is a home off the range that is important.

About 100 years or so ago, when horses and burros served as a means of transportation, it was inevitable that some of those animals would get away from their owners and not be recov-

ered. Sometimes, an old prospector or range rider would pass away and his horse or burro would be left alone on the open range.

Because these animals like the company of others of their kind, many managed to find other strays and they banded together. In time, their numbers increased and the offspring did not know



Blinds are set up to help guide the horses into temporary corrals.

what it was to have a human owner. The animals became feral, living off the land and its vegetation and water and coping in the best way possible to survive bad weather or other adversities. For the most part, they avoided humans from instinct, and soon, bands of wild horses and burros were in areas of the West. This was fine in

the days when there weren't many people inhabiting the West, but now, with development, the wild horses and burros compete with domestic horses, cattle, sheep, goats and humans for the use of the range lands. They also compete with other wild animals. It is estimated that there are about 54,000 wild horses and burros across the nation, most of them



The herd is located and guided into the corrals by BLM

or burros an area can support without damaging the forage which must stay available to domestic animals and other foragers like deer, antelope and elk. A number is set and estimates on the numbers of wild horses and burros are made. Then the round-up tries to achieve the right number and the matching of new "owners" to wild horses and burros begins. That way, the thrilling sight and sound of wild horses and burros is preserved in an area, but excessive numbers of the animals on the range are reduced through the adoption program.

The result is a good partnership of human and animal-the person gets the benefit of a horse

in the West. These animals need forage of brush and plants to survive, but so do other animals. Federal law prohibits capture of the wild horses and burros, so the Federal government had to devise a plan to manage the herds of wild horses and burros.

That's where that "home off the range" starts. It was decided to hold round-ups of the wild horses and burros and then offer them for adoption to people who would agree to care for them. Technically, the people don't actually own the animal-the Fed-

eral government does, but the people can use the animal for riding, driving or work provided, of course, that the animal is treated humanely. Many ranchers and farmers of the West have adopted some of these animals, but so have people who might be looking for just one or two animals to have on a few acres of land.

Being that the animals are



From the corrals, the horses are loaded into trucks and taken to BLM's wild horse and burro corral facilities near Ridgecrest, where they are vaccinated and prepared for adoption.

wild, they take some training before they can be used. But gentle handling, time and patience can turn a wild horse or burro into an animal which learns to like the company of humans enough to be willing to serve with riding, driving or work skills.

Range land managers employed by the Federal government determine how many wild horses or burro, and the animal is saved the job of struggling to find enough food to eat—a task which can be especially difficult in winter. It is a way to help nature stay in balance.

by Dr. Stephenie Slahor Photos courtesy of Doran Sanchez, Bureau of Land Management.

Part I

Was My Stomping Grounds

1901 - 1907



The author's family in 1901. Standing from left: Lillie Mae Cooper and Hazel Davies, married sisters; Frank M. and Mary S. Doyle, parents. Seated: Lieut. Col. R.N. Doyle, granfather, who had been general superintendent of construction for the Atlantic & Pacific R.R.; the author, approaching his teens; Robert N. Doyle, brother; and Elizabeth Jane Sweetman, grandmother, who came West in a covered wagon. Two younger brothers are not pictured.

Harrison Doyle was born in 1888 in Santa Monica, California and lived on a ranch there until he was nine when he joined his father in the new gold rush mining camp of Randsburg on the high Mojave desert. From there, at age twelve he moved to Needles where his teenage years were spent. He has written for the old "Desert" magazine and is currently finishing a book: "Harrison Doyle at 104; How I Sustain My Vital Electrical Life Force". He lives in Vista, California.

Article reprinted with permission from "The Wrangler-Westerners San Diego Corral", Vol. 22, No. 4, 1989.

My family arrived in Needles, California, in 1900, just four days after the disastrous Franconia train wreck east of Topock on the Arizona side of the Colorado river. The toll in that wreck was 24 lives lost and many more mangled and burned. The trainmen and the engine crew were from Needles.

The first thing I did after we

got settled out on Second Street was to look around for ways a twelve-year-old boy could earn a little spending money. Being a veteran along the same line the earlier years of my youth in Randsburg, it didn't take me long to get a business start in the new stomping ground. Billy Hutt, our new neighbor paid the kids two bits for every desert tortoise they could bring in. He offered me the same deal. Billy kept tortoises in his back yard and ate them just as other people kept and ate chickens. It took me two weeks to find two small ones and learn that the area had been worked out. Four bits for two weeks work! However, I did find an ancient clay water pot in a hole on the side of a mesa near town. I sold it to a collector, which helped my resources.

My dad owned the major stock



Lieut. Col. Richard N. Doyle, commanding officer 8th Michigan Volunteer Infantry during the Civil War. He later became construction supertindent for three different railroads: the Atlantic & Pacific Railway extending into California at Needles about 1880; the Guatamala State Railroad built in 1883-84; and the California Southern Railroad completed to National City in 1885. Both of the American lines were taken over by Santa Fe.

in the Induna Mines Corporation, with the LaMar Brothers, Billy and Charlie, holding a fair block of stock. The corporation had a crew working on a tunnel in the Dead Mountains about eight miles south of Needles. Dad also supervised LaMar's Barbershop and Clubrooms next to Quinn's Saloon. Billy and Charlie allowed me to run errands and carry meals to the men in the poker games. I also wangled a job delivering the weekly Needle's Eye, published by L.V. Root, who was also justice of the peace. Hoboes appearing before "L.V." invariably received 90-day sentences in the San Bernardino County Iail. He became known far and

wide across the desert as "90day Root".

Wyatt Earp had been a friend of Dad's since their days in Tombstone. No longer a peace officer, Wyatt operated his Happy Day Mine across the river from Parker and camped up river each month ostensibly to lay in supplies. But in reality he came to participate in the big poker games at Lamar's which followed the Santa Fe paydays. Wyatt Earp had turquoise-blue eyes, the most direct I've ever

seen. He was a relaxed, quiet man of medium size, wore a telescoped flattopped black felt hat and a big handlebar mustache.

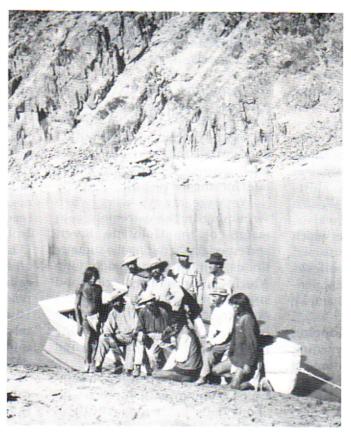
Unlike Randsburg, where we had come from and which had little water and no trees, Needles had plenty of both. The place was a verdant oasis on the edge of the seven-mile-wide Colorado River bottomlands. Among the varieties of shade trees were Washingtonia palms, umbrella trees, tamarisk, and oleanders. A kind of tough grass greened the little parks between the A.T. & S.F. mainline tracks and the town's Front Street. The river meandered ribbon-like down to the cleft in buff-colored mountains near the three needle-like spires rising on the Arizona side. Both the town and the local Indians derived their names from those peaks. The Indian word was Moh-cah-vah, mean-

ing Three Peaks. Those Mohave Indians were a continual source of wonder to us.

New and fascinating to me, during the long hot summer months, was the continual high-pitched song of the cicadas in the shade trees. They looked like giant horseflies, were a couple of inches long and hard to catch. Bats fluttered eerily about during early evenings, and lighting bugs flickered here and there—the first I'd ever seen. Droves of four-inch moths

swarmed unceasingly around the white arc lights in front of the depot. Centipedes and scorpions were old hat to me; but another tough customer in Needles that everyone feared was a sort of fast-running spider with claws in front called a vinegaroon.

Everything in Needles was mines and railroad. Santa Fe's millionaire Division Superintendent, John Denair, owned the big Orange Bloom mine near Eldorado Can-



One of the Wheeler Survey boats paused in the Grand Canyon while photographer Timothy O'Sullivan shot this photo of his fellow explorers and three of their Mohave guides. (photo courtesy Smithsonian Institution).

yon. The town buzzed constantly with men from the Bonanza King out of Fenner, or the old Vanderbilt Diggings in the New York Mountains, and from many other workings up and down the river.

Life in Needles revolved either around the Harvey House and Santa Fe Depot or around Monaghan & Murphys big Merchandise Store directly across the mainline tracks facing the Depot. The Harvey House and Depot building, where the slower trains stopped long enough for passengers to alight and eat, was of the gingerbread era. It was a long, two-story wooden building painted a dark hematite red. It had a second-story porch along the entire front. Downstairs was the ticket office and waiting room, lunch counter, and a large separate dining room. This dining room was comparable to anything in Los Angeles, with potted palms, white Irish linen tablecloths, cut glass,

and real silver service. When trains came in, a man in a white coat sounded a Chinese gong.

Behind the depot, across the vast yard track, were the great roundhouse and machine shops, reputed as the second largest on the Santa Fe system. Extra engines were required because of the isolation and the steep thirty-mile grade up to Goffs. Paydays were monthly, and railroad men were issued coupon books good for meals and rooms. They were accepted in poker games, as well.

Monaghan and Murphy carried everything from groceries through saddles, dynamite, hardware, "Blue Flame" oil stoves, and clothing. Next to them on the north was Postmaster Gilchrist's domain. I used to wonder how Mr. Gilchrist

could have such a black mustache with his snow-white hair. South of M. & M.'s on the corner, was Brigg's Saloon.

There were three other saloons along Front Street. All had acetylene gas lights, billiard or poker tables, and allowed men only. There were no dance halls, and no girls in the saloons. Gambling was wide open, and things really steamed up for a week or two after paydays.

We kids boasted that we could

always tell by the after effects where the men got their whiskey. In general, there were three kinds of firewater-singing, crying and fighting. The strains of "Sweet Adeline" let you know the hooch came from Cubbage's. If a drunk on the wooden sidewalk was crying we knew he had been to Quinn's. When there was a fight, we knew for certain the rot-gut which caused it had come from Briggs'.

Outside of that it was a new, warm peaceful world for me.

Men when idle sat around in the shade of the porch-fronted stores facing the mainline tracks. They rolled their own with Bull Durham or Duke's Mixture in brown wheatstraw papers. Some smoked Prince Albert or Velvet tobacco in the meerschaum pipes, vving with each other to see who could be the first to color his pipe a golden brown. Dad smoked Optimo cigars, and had his shirts tailor-made in Los Angeles. Women in those days wore shirt waists, leghorn hats, and long skirts which generally hid their high buttoned shoes. And, unless one believes the modern Virginia Slims cigarette ads, women didn't smoke

I did much of the shopping for Mother. One winter evening I was all dressed up to attend a taffy pull. I had on a new creamcolored pongee-silk shirt with a wine-colored four-in-hand tie, patent leather shoes, and a blue serge suit. I was tall and thin for my age, and on my head was my first derby hat. Mother asked me to go to the store before it closed. Her list included a pound of Jevne's Mocha and Java coffee, two bars of Grandpa's Tar Soap, a package of Gold Dust Washing Powder, and a sack of Capitol flour.

Despite my party finery I departed on her errand. At the store, Big Tom Murphy tore a piece of wrapping paper off the roll, put it on my shoulder and laid the sack of flour on it. Then, with the other items under my arm I hot-footed it for home. Some prankster must have pulled the little sew



Harrison Doyle in the summer of 1904.

string on the end of the sack, because when I arrived home I looked like I had been in the Blizzard of '88. I don't think I ever got all the flour out of that blue serge suit. Anyway, I was late for the taffy pull.

We were always wary when swimming in the extremely cold waters of the Colorado River, and especially so during the summer floods, with their accompanying whirlpools and buried driftwood snags. If the swift current swept one across a snag you were done for it. We generally gave the river a wide berth during high water.

We fished the river for "humpback" salmon, catfish, carp and "boneytails". There was little to the latter but skin and bones, and though they were plentiful then, are now extremely rare fossils.

During August, when the thermometer might go up to 120 degrees, we enjoyed taunting train passengers by frying eggs on the sizzling-hot steel rails. We broke the eggs behind the observation car where the gasping passengers would be fanning themselves in vain efforts to keep cool. One day when the eggs began quickly turning white on the rails one man got off the train and went to the icehouse to wait for the night train. We heard later that he caught pneumonia.

Nobody paid any attention if

the larger kids went into the saloons and put our nickels in the tall wooden slot machines. I soon figured out that a fellow could use a hatpin to stop the wheel on the white segment which paid off twenty nickels. I voiced my theory to one of the boys, a and a day or two later saw him and his friend thrown out of Cubbage's Saloon. He picked himself up and came over to where I was sitting in the shade. "The third time I speared the white dollar place, Cubbage threw me out," he said. But he was grinning happily, his pockets bulging with nickels.

At times the Santa Fe brought in traveling troupes of entertainers who put on shows in the Reading Room. When such troupes were not available the railroad allowed the townspeople to put on their own talent shows. I remember one evening Dad let me take our Edison Home Phonograph and a couple dozen cylinder records to help put on a show. I played "Please Mr. Conductor, Don't Put Me Off Your Train" which made quite a hit with the railroad people. Another of those records was "A Preacher Went a Hunting". That was the one where the luckless preacher ran into a grizzly bear. The last lines of the song were a sort of prayer: "Oh Lord, if You can't help me, for goodness sake don't You help that bear!" There were many others of the tinny records, and we had to crowd up close to hear. But we had a good time and filled ourselves with homemade ice cream.

A man named Williams was the town's jeweler and watch inspector for the Santa Fe. His son J.R. got the first motorcycle in Needles; a four-cylinder Minerva from Los Angeles. I watched him take his first ride. The machine came slowly sputtering down front Street, mis-firing on a couple of cylinders. All of a sudden it began to hit on all four, and before J.R. could recover control he banged squarely into a large umbrella tree.

About that same time some-

body brought a two-cylinder Rambler automobile into town. Both motorcycle and auto parked in the shade in front of William's Jewelry store.

Around 1903 we kids used to visit the Needles Landing and watch the Searchlight, last of the larger river stern-wheelers, tie up on its regular trips up river from Yuma. I had a fair speaking acquaintance with its whitehaired captain, Jack Mellen, who had been on the river for some 30 years. I remember feeling quite sorry for him because the little 90-foot Searchlight was such a comedown for him after having captained the big two-stacker Mohave No. 2 for so many years. There was another smaller sternwheeler, the Aztec, owned and opérated by La Mar Brothers. It made trips with supplies to Parker and Fort Mohave.

At the turn of the century, air conditioning as we know it did not exist. But every home in Needles had its kitchen icebox, served by ice made at the Santa Fe ice plant. Each family had a water-sweating earthenware olla for drinking water. Food was kept in a burlap-covered cooler, with a leaky pan or tub on its top to keep the burlap wet for evaporation.

Every desert town had its characters, generally a Shakespearespouting type or just a town drunk. Needles had its share in a diminutive Chinese we nicknamed "Fishie". Each Friday morning he received a couple boxes of iced fish imported from Los Angeles on the Santa Fe Number 2, the morning east-bound passenger train. He trotted about town with the fish in baskets at the ends of a pole across his shoulders. Fishie was under five feet in height and wore a big straw hat atop his braided black pigtail. All the town kids wanted to pull that pigtail, I'm sure. But they left him strictly alone, remembering that he was a protege of "Big Luke", the Mohave Indian who worked at icing the citrus trains. Kids didn't know it then, but we found out later

that Fishie was made out of steel and rawhide.

Fishie lived in a shack out behind the ice plant. He raised chickens and sold eggs along with the fish. His chickens roosted in a little shed fashioned from fivegallon coal oil cans. One dark night I was chatting with Big Luke at the ice plant when we head a loud thumping and banging out back at Fishie's. Luke grabbed up a Santa Fe signal lantern and we ran to see what was causing all the commotion. A terrific din centered in Fishie's chicken coop. Presently the door flew open and a cloud of white feathers erupted, with Fishie close behind. He was holding a struggling animal by a hind leg, its nose touching the

"What him?" he squealed at Big Luke.

"Him wildcat," came the Mohave's guttural answer.

Fishie screeched again, "Why, him fight like hell!"

When I was fourteen I had a chance to go to work as "call boy" for the Santa Fe night train crews. Inasmuch as I had read practically every book in Dad's library and was a couple of school grades ahead for my years, Dad let me take the job. From then on I was a privileged character in the big yards, day and night. I roamed the town notifying con-

ductors and brakemen what time their runs were due in, so they could be ready to take their trains out. I slept upstairs over the depot in the dispatcher's office, whenever I could late at night between calls.

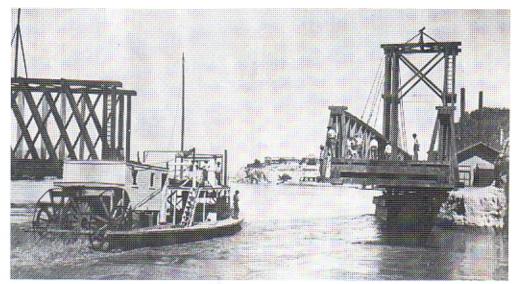
One morning around 4 a.m. I was roused from behind the potbellied stove and sent downstairs to find John Denair, the Division Superintendent, waiting for me. Denair was a silver-haired, stocky man around 60 years old. He had just arrived in his private car on Number 3, the west-bound limited which made a ten-minute stop to change engines and crews. But there was no crew on hand to take Number 3 on into Los Angeles. Number 4, going the other direction, was also due any minute. And there had been no crews called for it either.

"Where are the crews for these trains?" Denair shouted at me. I mumbled something about not waking up. Denair gazed at me for a long moment, quieting down. Then he turned to the irate conductor of Number 3 and said, "You boys will have to take her on and deadhead back."

To me he said kindly, "Go on home boy and get to bed. Your railroading days are over."

They were, and I returned to school. drug

Part II July/August edition



The stern-wheeler Aztec, owned by La Mar Bros. of Needles, plied the Colorado far down river, shown here being accommodated by the newly installed swing bridge at Yuma, in 1904.

GERONIMO

ne tenth of a mile before you enter the Tucson Mountain Park on Kinney Road in South Tucson stands a modest white sign with black letters that reads:

> GERONIMO III GRANDSON OF THE FAMOUS APACHE CHIEF Visitors Welcome

The simple two room dwelling handmade of poles and covered with a tarpaulin for a roof does not fit into the image you have of the invincible Apache warrior named Geronimo.

As you drive through the wire gate a man dressed like a cowboy has heard the car's engine and comes out to greet you. You scrutinize him carefully. His posture is erect; his smile friendly. He knows why you are here. You ask for confirmation of his identity.

"Yes...yes, I am Geronimo III. It is good to see you. I have not had any visitors for two days."

His voice is warm and tender as he recounts memories of Grandpa; the man known to the world as the Devil Apache Chief Geronimo.

The words come easy as he tells you that his father was killed by the military when he was very small. His mother Louisa (English version of the name) was killed later by the white man in their quest for safety from the Apache.

His simple statement "Grandpa raised me," leads into numerous tales of a legendary Indian warrior. "He was not a chief. He was a medicine man. He just wanted to protect his people. He only surrendered so they would not be killed."

Geronimo III as a baby in his father's arms next to his grandfather Geronimo.

Photo courtesy of Geronimo III.





A narrow board sets outside the cabin loaded with rocks he gathers to sell to visitors. On the opposite side of the door hangs the following sign:



(He usually charges a fee of \$2.00 for pictures)

Inside his home hang sling shots he has made to sell to tourists. They resemble the ones boys used during early pioneer days. On one wall the framed pictures of President and Nancy Reagan, President and Barbara Bush, a Presidential letter congratulating him on reaching his hundredth birthday, pictures of Geronimo, his father, and other Indians are on display to convince visitors of his age. Tucked securely behind the picture of Grandpa is a very old snapshot of the rock pyramid that marks Geronimo's grave in Fort Sill, Oklahoma. These are sad memories. His only remarks are "I was there, and promised Grandpa that I would never live on a reservation, and I never have."

Copies of newspaper clippings about himself and copies of other historical pictures are placed below the framed ones. These are for sale. He identifies the individuals in the pictures, and insists on signing each one purchased with the remark: "This signature makes it valuable. President Reagan told me this a long time ago." He worked on the President's ranch. Geronimo III spent many years working as an extra in Hollywood films. He played with Don Ameche in the film version of Ramona, in segments of Little House On The Prairie, High Chaparral, and many others. His present quarters are not too far from Old Tucson where many movies were filmed.



Geronimo at his front door - note the neck scarf typical of Apache dress.

Photo by Alice Bailes.



Display of photos and other memorabilia inside Geronimo III's home.

Photo by Alice Bailes.

Geronimo opens his gate to visitors at 8:30 a.m. every morning. One of his first chores is to build a wood fire to brew what he refers to as "Apache-coffee". While the coffee is brewing he waters and feeds his pets. They are the quail and birds that

by David Roberts. The article did not mention Geronimo III. I wrote to them to bring this fact to their attention. Their reply was:

Thank you for writing to the National Geographic Society and sharing your information with us tential interest have to be excluded, Geronimo III being but one.

We appreciate the opportunity to see your photograph, which I am returning to you. Our best wishes to you and Geronimo III.

It is indeed a difficult task to cover a lifetime in a single article, and it is not this author's intent to rewrite history. I merely wanted to introduce you to someone I met four years ago when I left Highway 10 south of Tucson in search of a bit of history. It was on Kinney Road that I discovered a centenarian whose memories include the father figure who raised him, a medicine man named Geronimo.

Mary Alice Bailes is a free-lance writer who lives in La Quinta, California.



Geronimo III's house at the foot of the Tucson Mountains.

Photo by Alice Bailes.

arrive on his schedule for a free handout. One wonders just how many generations of mother quails have brought their offspring here for their daily meals.

In contrast to his simple life style are the vivid memories that he so easily recalls – memories that include the philosophy of a Geronimo that historians do not write about – the kinder and gentler medicine man.

As he warms up to his visitor he will bring a treasured memento out of his pocket. . . an International Investigators Badge given to him when he worked for the Texas Rangers.

I asked him who owned the land he occupies.

"I do. It belonged to my grandfather and I inherited it." was his reply. This statement brings to the fore the many years this renegade orphan boy has fought to be recognized – a fight with historians as well as with the Apache Nation. Their bibliography compiled in the 1950s does not include Geronimo III.

The National Geographic magazine printed an artice in their October issue on Geronimo written



Table with display of rocks for sale.

on Geronimo III.

As you can imagine, one of the most difficult tasks for a writer to perform is deciding what material will be featured in an article, what material will only be briefly mentioned, and what items, due to space limitations and other factors, will be omitted. In a biographical article such as the one on Geronimo, many items of po-

GRANDSON OF THE FAMOUS APACHE CHIEF

Visitors Welcome

Photo by Alice Bailes.

DESERT DEPOTS

Clifton, Arizona—The Arizona And New Mexico Railway Depot



The historic post card: Clifton's Arizona and New Mexico depot seen in earlier days. Used with permission of the Greenlee County Historical Society, photos of Risdon Studio.

he Arizona towns of Morenci and Clifton share a common heritage, but present a true dichotomy: they are two very different places, and are only two miles apart. Morenci today has the appearance of a modern, company mining town which is precisely correct. Clifton, on the other hand, provides an historic, albeit somewhat ramshackle ambience not unlike its copper mining sister cities of Bisbee and Jerome, Arizona. And Clifton is home to one of Arizona's most architecturally splendid and beautifully restored railroad depots. Let's find out how and why these two towns have become so different and why the railroad was so important to this area.

AREA HISTORY

Clifton's setting is naturally beautiful but rugged. Located at the confluence of the San Fransisco

By: James N. Price Photos by the Author

("Frisco") River and Chase Creek, Clifton has the appearance of a river town and has suffered numerous times from severe floods. Morenci lies to the north, a few hundred feet higher in elevation up Chase Creek alongside the rich copper mines which today are large open pits. It was not always thus, however.

The area's mining history began in 1870 when Bob Metcalf, a prospector from Silver City, New Mexico, noted extensive copper ores. The Longfellow was the first major mine, operated by the Arizona Copper Company. The town of Metcalf was located near the Longfellow, and Clifton, founded in 1873, smelted the ore for this mine. Legend has it that the name comes from "Cliff Town" for cliffs alongside the river. The Detroit Copper Company owned the other large mines in the area, and its smelters were constructed at what would become Morenci. One of several versions of the source of

this name is that Detroit Copper's President, William Church, was from Morenci, Michigan.

By the mid-1870s, mining activity was feverish and profitable, but transportation of the ore was costly and time-consuming. In 1879, Henry Lesinsky, a senior partner of the Longfellow Mine, built a "baby-gauge" railroad, the Coronado Railroad, from the mine to the smelter at Clifton. This 20-inch narrow gauge line was originally mule-powered; mules pulled the empty cars upgrade to the mine, and then were loaded into an empty car along with the ore for the gravity powered, "wild ride" down to Clifton. Derailments were frequent, but it didn't matter; train operators could just pick up the small equipment and put it back on the tracks by hand! Several steam locomotives were purchased from H.K. Porter in Pittsburgh and started running on the line in 1880. (Two of them are on display today-one each in Morenci and Clifton). However, the district still needed a link to the outside world which will be discussed later.

The mining district had its ups and downs as copper prices and demand fluctuated. Operations nose-dived in the early 1890s, but boomed in the first decade of the 20th century. Both Morenci and Clifton began to take on an air of permanence, and Greenlee County was formed in 1909 with Clifton as its seat. Starting in the 1890s much of the mining was consolidated under Phelps Dodge which is still the owner/operator of the entire district today. Copper demand peaked during World War I, but slipped drastically thereafter, to the point that the entire district shut down in 1932.

Up to this point, all mining had been underground. As copper prices gradually inreased in the 1930s, though, Phelps Dodge elected to start open pit mining in the district, and the Morenci Pit commenced operations in 1937. As the pit grew in size, the Morenci townsite was destined to be swallowed up, and the new, present-day site of Morenci began to be populated in the 1960s. The old site, which contained many charming and historic buildings, was abandoned in 1977. In the early 1970s operations commenced at the Metcalf Pit, some 2 miles northeast of the Morenci Pit, and the old Metcalf townsite quickly disappeared.

Clifton, meanwhile, continued as a smelter city and county seat for many years. Its smelter is long gone, but the historic, somewhat rundown courthouse still graces a hilltop in the southeast part of town. The famous Chase Creek Historic District on the west bank of the river is a true diamond-in-the-rough. It contains several city blocks of turn-of-the-century buildings, many boarded up, some badly in need of repair.

Clifton has had frequent problems from flooding over the years. Major floods occurred in 1886, 1891, 1895, and so on, right up to a truly devastating flood in 1983 from which the city and local economy are still recovering. The district also had the dubious distinction of having some of the worst labor relations problems in all of the 1980s, finally resulting in the decertifying of the union in 1986. Thus while the area produces over 100,000 tons of ore a day and has enough to keep in business for decades more, the overall state of the county's economy is depressed. A slow recovery is underway, and the area's natural beauty plus the fascinating "ghost town"-like buildings in the Chase Creek District, certainly have tourist potential.

THE ARIZONA AND NEW MEXICO RAILROAD

As noted earlier, transporting the ore of the district became a critical and expensive problem early on. Initially ore was hauled by wagons to La Junta, Colorado, and later to Silver City, New



Clifton's Arizona & New Mexico depot today newly restored and serving its community in new, non-railroad functions.

Mexico. Finally by 1880, the Southern Pacific (SP) Railroad had reached Lordsburg, New Mexico, some 65 miles to the southeast. But Clifton still needed a direct railroad link, so construction of a narrow-gauge railroad, called the Arizona & New Mexico (A&NM), between Clifton and Lordsburg commenced in early 1883. By mid-1883 this railroad had reached from Lordsburg to Duncan, more than half way to Clifton. But then a combination of financial difficulties and unanticipated construction problems delayed completion of the line to Clifton for several months. One can only imagine the wild enthusiasm of the town's people when the first train to Clifton finally arrived on April 5, 1884.

A number of steep inclines were constructed at the mines to bring ore down to the Coronado Railroad for the trip to the A&NM railhead at Clifton. In addition, several other railroad lines, the Morenci Southern and Shannon-Arizona among them, served the district. So, by 1890, the area



An overhanging balcony graces Zorrilla's Meat Market in Clifton's Chase Creek Historic District. This building, from the 1890s has been in use as a meat market since 1927



The author checks out one of the 20-inch "baby gauge" locomotives used by the Coronado Railroad in the 1800s. This is on display in Morenci's shopping center.

boasted a number of rich and productive copper mines, and three sizable towns: Metcalf, Morenci, and Clifton, all interconnected by rail and with an important railroad connection to the outside world.

A&NM operated profitably for many years, hauling coke and coal into the district's smelters,



Clifton's Chase Creek Historic District is a "diamondin-the-rough;" interesting turn-of-the-century buildings, many of them badly in need of repair.

and hauling copper bars and processed ore outbound. Transfers were made at Lordsburg to the SP by which Morenci's copper was delivered to the world's markets. This line, as is often the case with desert railroads, suffered from frequent washouts. So, it was significantly upgraded in 1901 to standard gauge including the construction of the new

trestles, lessening of grades and straighten-

ing of curves.

In 1922, Phelps Dodge sold the line to the El Paso & Southwestern Railroad which was in turn subsumed by Southern Pacific in 1924. Passenger service had never been a prime consideration on this line. In fact this was one of the few lines that offered so-called mixed trains; passengers and freight were hauled by the same engine. incredibly, this arrangement existed until 1967. Starting in 1939, Phelps Dodge began operating its own locomotives-first electric, later diesel—to bring ore and processed copper to Lordsburg. Today the A&NM is the Southern Pacific's Clifton Branch, and the transfer of cars from Phelps Dodge to SP occurs at Clifton. This line, then, is one of the oldest continuously active shortlines in all of the west, having now served the Clifton/Morenci district for almost 110 years.

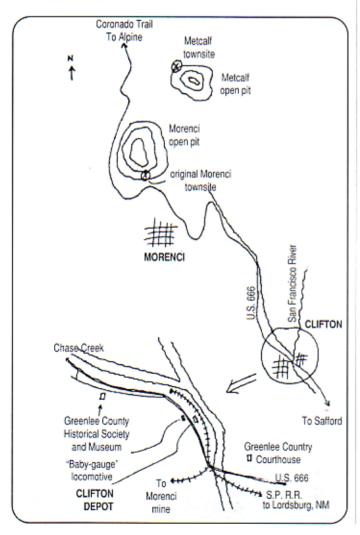
THE CLIFTON DEPOT

The present building is Clifton's second railroad depot at the northern terminus of the A&NM line. It was dedicated on October 21, 1913 and has dominated what was a sizable railroad yard during its 80 years of existence. A&NM and later SP used the depot for both freight (primarily) and passengers right up to the mid-1960s. As with many historic railroad depots, this building's future was in doubt thereafter, and the flood of

1983 that severely damaged all of Clifton deposited feet of mud around and inside the depot.

But the building has undergone a renaissance, thanks to a combination of grants and funds from the National Park Service, the Arizona State Historic Preservation Office, the Community Development Block Grants program, the Arizona Department of Transportation, and Southern Pacific itself. Nearing complete restoration, inside and out, the depot will serve Clifton for many more years. Presently the building houses the Greenlee County Chamber of Commerce, and a senior citizens volunteer group. Plans include a recreation hall for local kids on the second floor.

The large 2-story brick building is quite striking with its red tile roof and extremely wide overhanging eaves. The restoration work on the depot has been of fine quality, especially the woodwork. Like a newly restored antique automobile, the building may even be in better shape now than when it was first built! And for railroad buffs, there's plenty to see immediately adjacent to the depot; Phelps Dodge diesels haul cars full of ore down from the mine every day, and SP engines arrive later to take the cars to the outside world. Clifton can be very proud of its railroad history, even if it's always been at the end of the line, and this depot provides a marvelous link to that heritage.



Another large 2-story brick building just to the north of the depot provided spaces for A&NM's offices and a bank. It presently houses a gift shop. Between the two buildings on the west side of Highway 666 stands one of the "baby gauge" locomotives of the Coronado Railroad. Another is on display in Morenci in the midst of the main shopping center.

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rocky cliffs.

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"Playing Tourist" in Clifton/Morenci

lthough this area is rather business-like and certainly off the beaten track, tourists can

find much of interest. As noted in the accompanying article, the Chase Creek Historic District in Clifton is perhaps the West's best example of opulent but "ghostly" buildings from a wilder time in the past. In the midst of Chase Creek is the completely restored Eagle Hall, now home to the Greenlee County Historical Society and a fine local history museum. Clifton's riverside setting with its graceful bridges and steep cliffs is quite scenic. And numerous historic buildings in various stages of repair and disrepair can be found in the city's three distinct divisions-"downtown" on the west side of the river (Chase Creek area), "East Clifton" and "Hill's Addition" which includes the courthouse on the east side. Don't forget to visit the depot, too! And right across the street from the depot is a rather unique jail carved into the

Uphill in Morenci, the Phelps Dodge folks offer a great tour of their open pit operations. For over two hours, visitors are bounced around (gently, of course) in a van exploring the different levels of the Morenci and Metcalf Pits. They are allowed to take home a few samples of copper ore, and they can pose for a photo alongside the enormous 170-ton ore-hauling trucks with their 13 feet diameter tires! Visitors also see a ball mill where ore is processed. The sheer size of the operation, from the shovels and trucks in the pit to the processing machinery, can only be appreciated in person. Excellent food and lodging are available in Morenci.

For those who don't mind a twisty scenic road, Highway 666 north from Morenci, the Coronado Trail, provides a driving adventure with some views to what seems like the end of the earth. This is an especially nice trip in the Fall when the aspens at the higher elevations are aflame with color.

Llano del Rio

A Desert Utopia

by Gary B. Speck
Photos and may by the author

In the 1900 presidential election, Eugene Debs ran under the Socialist ticket. His running mate was Job Harriman; a former Indiana farmboy, a "burned-out" Disciples of Christ minister, and finally a prominent Los Angeles attorney and an espouser of Socialistic politics. In 1911, Harriman even ran for mayor of Los Angeles under the Socialist Party banner.

He lost by 34,000 votes.

Undaunted by the loss and buoyed by the increasing interest in Socialistic causes, he ran again in 1913. This time in a three man race, he finished third, only 800 votes from second place.

What does this have to do with the mortared rock pilasters, fireplaces, and walls straddling California State Highway 138 midway between Palmdale and Victorville?

After the 1913 elections, a politically battered Job Harriman still wanted to prove to the world that social-

The "Stonehenge" of the Southern California desert . . . the old Llano del Rio hotel.



Closeup of the former entrance to the Llano del Rio hotel.

ism was a viable political statement, and the wave of the future. He wanted to prove to all that with cooperation a true socialistic community could work with a little effort.

He planned to form a corporation, buy some land, organize a cooperative colony, then sell memberships for \$2000 for a maximum of 2000 shares in the venture. Each colonist would then collect wages of \$4.00 per day, and get a free house as long as he or she "labored for the cause."

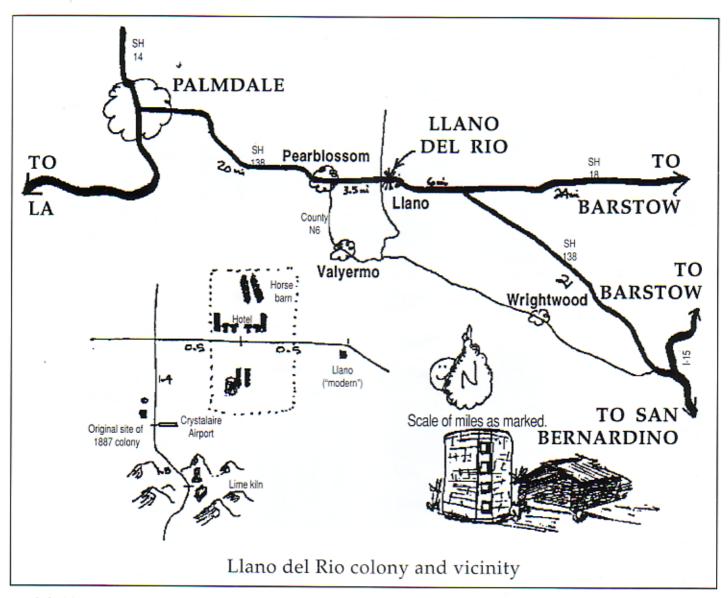
In the fall of 1913, Harriman and his supporters heard about a possible site in the southern fringe of California's Mojave Desert. They travelled to the Antelope Valley and toured a site with pear orchards, alfalfa fields and several scattered The homes. Llano del Rio Rancho was purchased from the owners, the Mescal Water and Land Company, for \$80,000, and the future colony had a place to put down roots.

On October 10, 1913, the Llano del Rio Company was born with a \$2 million stock offering. Harriman was elected president of the board of directors.

In May of 1914, the first group of colonists arrived at the site, and buildings were erected. Many were of canvas and wood, while others were built of adobe or local rock mortared together with lime mortar obtained and processed from two colony-owned limestone quarries and kilns located several miles away.

Shallow stone lined ditches carried irrigation water from Big Rock Creek, which the colonists quickly grabbed control over, for the water rights. Two thousand acres





of fields were planted.

Their goal was self sufficiency, and that goal was nearly obtained. An active dairy furnished plenty of milk. Other livestock included rabbits, horses, and The fields produced poultry. their crops of alfalfa and grain, and 75 acres were transformed into a large vegetable garden. Existing pear orchards, established by others ten years previously, created dreams of massive commercial orchards in the minds of the Llano directors. Times were indeed flush.

A two story 50x150 foot wooden hotel with huge stone fireplaces and four front stoop pilasters was the center of the colony's social scene. Here was located bachelor quarters, a barber shop, library, huge dining hall, and a print shop. The shop published

a weekly newspaper, the Llano Colonist, and a monthly magazine, the Western Comrade.

Other endeavors on the colony site included a wood frame post office, which opened its doors in January, 1915. Other buildings included the hotel, a boot factory, a cannery, dairy, fish hatchery, machine shop, planning mill, steam laundry, and a soap-making plant. A school was established, and education was high on the forefront of priorities.

There was a Montessori school for the youngest kids, a regular county supervised grade school, and an industrial school for the older youths. This last school provided hands-on training for many industrial trades.

When not studying in one of three schools, the students enjoyed social activities such as swimming, dancing, music, and team sports such as baseball.

Adults also enjoyed non-working pastimes. A brass band marched in many local parades. undefeated baseball team played teams from other communities all over the western desert region. Other "sporting" activities included a football team, billiard society, rod and reel club, and literary discussion groups. There was a strong women's auxiliary group that promoted arts and crafts exhibits. There were the Saturday evening community dances. There were the Sunday evening entertainment sessions in the community room of the hotel, that consisted of readings, plays, musical programs or even lectures.

The colonists lived in canvas sided "cabins", which in reality were nothing more than fancy tents. There were also a number of wooden cabins shown in several period photos. These were temporary shelters until the adobe or rock homes could be built.

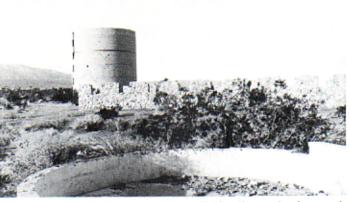
Wages were \$4.00 per day, and were paid in credits, rather than cash. The colonists could then trade their credits for goods at the colony store. The colonists hailed from many areas and practiced many trades. It is claimed that some 60 different occupations were present and operating.

At the time of its first anniversary in May 1915, Llano counted 300 citizens. At this time, with the colony growing rapidly, a governing body was formed. Under the leadership nod of Job Harriman, the "General Assembly", and to a lesser extent, a board of commissioners took over the day to day governing of the colony.

Harriman, still a practicing Los Angeles lawyer, spent much time in the city defending the men accused of blowing up the Los Angeles Times building. He spent so much time there, that the colony began to unravel. Complaints ranged from the slowness of building homes for the colonists, to empty shelves in the commissary.

A number of colonial dissidents formed a small support group called the "Welfare League". They openly criticized the management of the colony as well as Harriman's lack of participation in the day to day existence of his so-called dream. They called for the resignation of Harriman, but in May of 1915, along with celebratory anniversary doings, the commission resigned instead.

The Los Angeles Times, long a foe of Harriman and Socialism in general, jumped into the fray when the rift became large enough



Dairy barn, watering trough and alfalfa silo at the far south end of the Llano del Rio colony site.



Bob's Gap lime kiln caretaker house alongside the road to Valyermo.

to see.

Despite the political infighting, most of the colonists were too busy working to notice, or even care. In October, 1915, the colony boasted of 500 people, two hotels, the post office, 40 completed houses (26 adobe, 14 frame), 8 ranch houses, 78 tent houses, rock horse barn, rock dairy barn, concrete block silo, a bath house, and a solarium.

During the winter of 1915/16, high winds heavily damaged the site. To add to Harriman's misery, the California Commission of Corporations sent an investigator to the colony to snoop for broken corporation laws. Harriman squeaked through, which caused the Welfare League, and their fellow dissidents to pack up and move on.

The colony continued to grow through 1916 and into early 1917. This was in spite of a labor drain, and some additional factionalistic bickering. To top off the problems, the alfalfa crop ripened prior to the next meeting of the General Assembly, which was the only body able to authorize the harvest! Needless to say, the following meeting was its last, as the entire year's alfalfa crop was lost, much to the chagrin of the colonists.

The factionalistic side of human nature and the capriciousness of Mother Nature finally created problems too tough to solve. The water failed, and more bickering broke out. Harriman sold the colony site, and his group purchased 20,000 acres in Louisiana. They moved there, and by the beginning of 1918 established Newllano.

In November, 1917, some 800 colonists still remained in California, but that number dropped rapidly as an exodus to

the Louisiana site began. After the drain, only 75 folks remained, but they only stayed a short time.

The California colony went into receivership in 1918, and Harriman fought the courts to keep it open. He tried to prove it was fiscally viable, even though the base of operations was moved to the Louisiana site. Harriman lost, and this sealed the fate of the California phase of his utopian experiment.

The colony site was abandoned and within several years had been stripped of anything of value. In the mid 1920s, the colony's street dedications were rescinded by LA County, and the casket was nailed shut on Llano del Rio.

Harriman died in Los Angeles in 1925 at the age of 64.

 The site of Llano del Rio is unique for desert ghost towns.
 The ruins are highly visible along a major highway, yet remain relatively



The San Gabriel Mountains form a backdrop to the 30 foot high alfalfa silo and dairy barn at Llano del Rio.

untouched by the rampant vandalism that seems to be claiming more and more sites. The site stretches nearly 3/4 mile, from the rock walled ruins of the horse barn at the north end to the 30' tall concrete block alfalfa silo and castle wall-like dairy barn at the south end. In all, there are substantial ruins of at least eight structures, two above ground water tanks, foundations and evidence of at least 25 buildings. In the nearby hills the old lime kilns are still visible. At the Bob's Gap kiln, the dressed granite caretaker's quarters also stand.

Along 165th Street East, between the lime kiln and the junction with SH 138, is the site of the original 1887 era temperance colony that was purchased by Harriman. Here a two story wooden house stands. It is rumored to have been the post office/general store for the original 1887 colony. The pear orchards around it are still bearing, and just to the north of the orchard, is a rock foundation and rock building. These also date back to the colony days.

The colony site of Llano del Rio proper is a half mile east of the intersection of SH138 and 165th Street East, and half mile west of several closed businesses, a post office, and a couple of operating businesses that mark the site of the tiny desert community of Llano.

The Southern California desert region plays host to many ghost towns, but none are as unusual as the failed socialistic utopia known as Llano del Rio.

In December 1992, a "for sale" sign near the site of the 1887 colony and the modern Crystalaire Airport shows a parcel of land for sale by E.E. Debs. Coincidence or ???

Gary B. Speck has been exploring the American Desert in search of ghost towns for over 25 years. He enjoys researching the histories of them, and writing about his discoveries.

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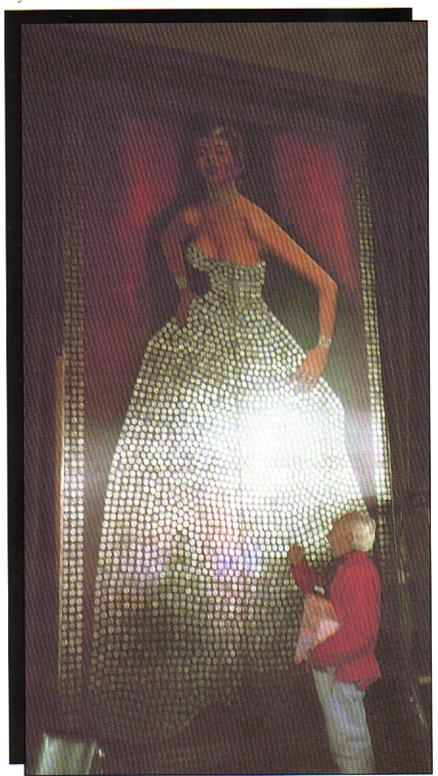
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Horse barn and a watering tank at the far north end of the colony site.

Shady Ladies Of The Wild West

By Louise Cave



Portrait with skirt of silver dollars. Reflects opulent era.

They're part of the legend and mystique of pioneering stories, the frequent heroines of cowboy movies and television series, glamorized far beyond reality of their sordid lives in a hundred frontier towns from Dodge City to San Fransisco: the shady ladies of the cattle towns and mining camps of the American wild west.

The fictitious "Miss Kitty" of the "Gunsmoke" series was styled as a lady saloon keeper, which made for palatable family television fare, but in the early days of Tombstone, Arizona, such monikers as "Big Nose Lil" and "Mustache Maude" more clearly defined the attractions of the females whom the good wives of the community referred to as "fallen women." In fact, it was in Tombstone, scene of O.K. Corral fame, that women of unsullied reputation banded together and decreed that their scarlet sisters must walk only on the shady side of the street, thus coining the term "shady lady."

If truth were known, adventurous members of the world's oldest profession came into the frontier towns ahead of the more The census virtuous types. conducted in Virginia City, Nevada, in August of 1860 showed that there were 2,390 silver miners and prospectors but only 118 women. That was a ratio of 20 to 1. According to Douglas Mc Donald, author and former deputy sheriff in Virginia City, the going rate was anywhere from ten to twenty dollars in the old

There was a hierarchy or social strata among these loose ladies, depending on their clientele and where they worked. At the top of the heap were those employed in fancy brothels, supervised by a madam, and order kept by a bouncer. Whisky was served at the bar, and perhaps a piano player knocked out some lively tunes on a battered upright.

Down the social ladder were the solitary prostitutes who lived



Tourist buses roll where prospectors trod Comstock Lode.

in rented cabins away from the main street of town. These women were generally quiet and avoided problems by entertaining only one customer per night.

On a lower level were girls employed in the back rooms of saloons, and at the very bottom were Chinese girls who had been sold into slavery to service the coolies and other menial laborers for as little as one dollar per customer. They were required to turn most of their earning over to their masters. Alcohol and drug abuse were common among this class.

One unfortunate prostitute was to emerge as a legend of the West. Her name was Julia Bulette. In recent years that legend has grown to fantastic proportions: she was the wealthy owner of a gambling casino or fancy bordello in Virginia City and drove through town in her coach drawn by four white horses; she was a glamorously beautiful New Orleans quadroon who attired herself in the latest Paris fashions and furs, gifts from her wealthy admirers; she was the toast of the miners who defended her during an Indian

uprising in 1860.

None of this was true. The woman known as Julia Bulette was born in England in 1832, coming to the U.S. as a young girl. Somehow she moved to New Orleans where, still in her teens, she married a man named Nobody knows what Smith. became of Smith, but by the time she was twenty years old, Julia had taken the name of Bulette and was working as a prostitute in California. On the Comstock she worked as a solo in her rented cabin, and was the favorite of the volunteer fire brigade who made her an honorary member. When she was thirty five years old Julia was found beaten and strangled in her own bed. A Frenchman named Millian was arrested, found guilty of the murder, and was hanged.

Somehow the legend of Julia Bulette mushroomed all out of proportion when the tourist boom hit Nevada in the 1950s. Erroneous books were written about her, and there was even a fictionalized episode about her on "Bonanza." Later a local saloon was named in Julia's honor.

As the frontier gave way to civilization, families moved into mining and cattle towns of the west. Occasionally churches would demand that red light districts be abolished, and the press would go along with public pressure. However, as long as there were lonely men with their pockets full of silver dollars, the business continued to flourish. When the Comstock Lode was played out, the remaining girls moved on to Tonopah, Goldfield, and points south.

A few married, settled down and became "respectable." One friend on a recent ancestor hunt traced her family to Virginia City. Aspiring to find a background of silver barons and elegant mansions, she found instead that great-great grandma had occupied one of the cribs on D Street! There was less conversation about Nevada genealogy.

So much for the cowpokes and forty-niners, the wagon trains, and the mining camps. Their legends are told around campfires and emblazoned across wide screens as the mystique of the Wild West. And the Shady Ladies too.

News Items

Search for Carey

Superintendent David E. Moore has announced that a search is underway for information about a prospector named Arthur Carey.

There is some doubt about the correct spelling of Carey's name; it could be Author Cary. Carey built a small one-room house under an overhanging rock within the monument. It appears that Carey lived in the rock shelter sometime between 1938 and 1942.

If anyone has information about Arthur Carey please contact park ranger Jeff Ohlfs, at (619) 367-3523, Joshua Tree National Monument.

The Wild West on Display

Nevada-A spot where Indians honed arrowheads; a way station for westward pioneers; and a home of a unique fish and flower: Soldier Meadows is where cultural and natural history are on display.

Soldier Meadows, a new Conservancy acquisition in northwestern Nevada, is a marshy expanse in the Great Basin Desert roamed by pronghorn and ringed by sagebrush and ancient volcanoes. The area is dominated by springs warmed by volcanic vents. The hot pools and harsh volcanic soils have molded rare forms of life, such as the little hot-water fish called the desert dace and the toxic-soil-loving plant called the basalt cinquefoil. The entire world of both species is bounded by Soldier Meadows.

The area was once a magnet for Indians, who hauled volcanic rock from the surrounding hills and chipped

Order back issues of



can be obtained for \$5.00 per issue as available. CALL: (619) 329-7762 arrowheads in the comfort of the meadows (where many flakes can still be found). For westward settlers crossing the harsh Blackrock Desert, it was a welcome oasis. Ruts of the settlers' wagons and the remains of an old cavalry fort can still be found at Soldier Meadows.

"It's a pretty place in a sort of a raw way," says Conservancy land steward Teri Knight. "You get a feeling of being in a Conestoga wagon, and a flavor of settlers and fur traders before we had highways."

The Conservancy is protecting some 10,000 acres at Soldier Meadows in a cooperative venture with the U.S. Bureau of Land Management and RC Roberts, the owner of Soldier Meadows Ranch. The partners will work to safeguard the historical and natural features of the area along with existing cattle grazing and guest ranch operations.

William Stolzenburg March/April 93 Nature Conservancy

Ancient Rock Art

Petroglyph National Monument in Albuquerque, created in June 1990, is dedicated to the preservation and enjoyment of petroglyphs, or rock art found in Albuquerque's long, dark undulated West Mesa volcanic escarpment. Images of mountain lions, birds, lizards, serpents, human ceremonial figures, masks, crosses and abstract designs were carved by inhabitants of large pueblos along the Rio Grande from A.D. 1300 until the time of Francisco Vasquez de Coronado in 1540, with some dating back to hunter/gatherers 3,000 years ago and Hispanic settlers in more recent times. Tours of Boca Negra Canyon, Piedras Marcadas Canyon and Rinconada Canyon are being conducted by National Park Service rangers from Memorial Day through September. The Visitor's Center is open year round except Christmas, New Years day and Thanksgiving. Hours are 8 am to 5 pm daily. Petroglyph National Monument, 4735 Atrisco Dr., N.W. Albuquerque, NM 87120. (505) 839-4429.

Books To Read

continued from page 5. execution en masse by the Spanish of all the descendents to the chief. After decades of dispute about who would head the clans, it was decided that the son of a daughter of the Crane Clan (Edmund's mother) would be the new chief. As with any forced decision, this one created conflict within the village about the family's worthiness. Edmund's mother was often ostracized and the family was often forced to live at the father's village. This is extremely unusual for a matrilineal society, and reflects the social pressure borne by his mother for the honor thrust upon

Not only did Edmund lose his home to internal disputes, but his family was pressured by the U.S. government to send him to Indian Boarding School where he was to be "civilized." Some of the indignities suffered by Indian boys and girls at these schools included having their heads shaved; being locked in after supper without a toilet; hard work on school holidays and wages stolen. The matter-of-fact tone of Mr. Nequatewa in the telling of these trials makes the reader wonder if he ever resented this mistreatment. (I know it made me angry!)

Much of this autobiography relates turn-of-the-century Hopi life in wonderful detail. The reader feels the rhythm of Puebloan life: the red mesas, the excitement of the Kachina ceremonies; the making of piki (a delicious blue corn wafer); the shaman and his medicines. We come to understand childrearing practices in the mischievous pranks of small boys living in a very child-tolerant society. (As the mother of three boys, I gritted my teeth!) The stories also give us the indomitable human spirit which refuses to be crushed by the inequities of life. Mr. Nequatewa's boyhood life was one worth the telling and one which will stay with the reader. Published by:

University of Arizona Press, Tucson, AZ 198 pages; Paperback. \$13.95



GEOLOGY OF ANZA-BORREGO:

Edge of Creation

by Paul Remeika and Lowell Lindsay with contributions by Bill Hample and Dr. Richard Philips. reviewed by Bern Schwenn.

This reviewer, as a collector and user of field guides, approached the reading of *The Geology of Ana-Borrego: Edge of Creation* with relish. Few geology field guides have been published for the desert areas surrounding the Salton Sea, the region known as the Salton Trough. This useful field guide provides a welcome addition to the literature for those who wish to acquaint themselves with this region.

To whet the reader's appetite, the authors begin with a series of thumb-nail sketches that highlight the major geologic events that have occurred during the more than 250million-year history of the region. Following this short overview, the authors develop specific topics in more detail, including the opening of the Gulf of California and development of the Salton Trough, the history of faulting within the region including a discussion of recent earthquakes along the San Andreas Fault, and the building up and wearing away of the mountain ranges that rim the Salton Trough. These chapters are followed by an excellent discussion of desert climate by Bill Hample.

The authors follow the general overview of regional geology with eight field trips that use existing jeep routes and roads within the state park and conduct the reader through this vast desert wilderness on "geology discovery" tours. Each field trip begins with the distance traveled, the normal road condition. the best season for travel, a summary of the route and a general description of the area to be visited. The trips begin at known and easily found locations, such as campgrounds and road junctions. To further enhance route finding, odometer mileages are tied where possible to San Diego County's mile post markers.

The appendices supplement the

field guide and provide a glossary of selected geological terms, a list of the larger earthquakes to hit the region since 1850, a selected bibliography and list of recent geological abstracts for the Anza-Borrego region, as well as a recommended reading list. An excellent index allows the reader to cross reference topics between the field trips in Part II and regional overview in Part I.

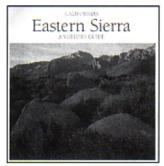
In the preface the authors state that technical terms are minimized in the text. However, beginning with the overview of regional geology, the reader is immersed in "geojargon." The text is often hard to read and weighed down by technical terminology, reducing the usefulness of this field guide. Such technical jargon, even with the "glossary of geological terms" included in the appendices, may impede the understanding of a novice lacking previous exposure to geological terminology.

Additionally, in their efforts to be concise, what the authors have left unsaid about plate tectonic interactions is more than enough to confuse the untrained novice. The regional overview may also be unnecessarily confusing for geoscientists unfamiliar with Southern California geology. The overview details the relationship of the Peninsular Range Province to the Salton Trough and San Andreas Fault Zone but leaves the location of this province, its geographic relationship to surrounding provinces, and the ranges found within it to two maps, one in chapter 4 and one on the second to the last page of the appendices.

Despite these short-comings, the authors have made a welcome and much-needed contribution to the natural history literature of the Anza-Borrego region. This field guide provides a useful tool for individuals interested in the geology of the Anza-Borrego Desert region and an excellent companion to Lowell and Diana Lindsey's road and trail guide, The Anza-Borrego Desert Region: A Guide to the State Park and Adjacent Areas (1984). Although this field guide has not been written for the novice, it should provide insights into the region's geology for both geology buffs and students and earth scientists unfamiliar with the area.

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CALIFORNIA'S EASTERN SIERRA

A Visitor's Guide. by Sue Irwin. reviewed by Joan Brooks.

This is a truly beautiful book with wonderful photography that portrays the Eastern Sierra region with vignettes about each subdivision: Lone Pine, Independence, White Mountains/Big Pine, Bishop, Mammoth, and Mono Lake/Bridgeport, and the many places you may want to visit.

Although much of the text is about the mountains, the Mojave desert area is not left out. Geology, plants and wildlife are covered as well as historical sites, ghost towns and museums – all in a format that is very readable. The sectional maps are beautifully executed and informative. I was particularly pleased to see a photo of Mary Austin's former home in Independence where she wrote "Land of Little Rain."

The book includes a list of resources with addresses and phone numbers for those who wish to explore in more detail the wonders of this magnificent region so dear to the heart of John Muir. A selected bibliography rounds out this book to make it a must for those who want to visit this region or for those fortunate enough to live in a land of such dramatic contrasts.

Published by:

Cachuma Press in cooperation with the Eastern Sierra Interpretive Association. 1991.

144 pages; Paperback. \$15.95

Desert Kids' Corner

THE DESERT ROADRUNNER AND GAMBEL'S QUAIL

As we build up our deserts, we destroy the homes of animal life that has lived there for thousands of years. All desert animals must adapt to our way of life, or leave their home.

I live in the Coachella Valley where roadrunners used to roam vacant lots and hills searching Roadrunners travel for food. along, searching for snakes and lizards to eat. They need a lot of space to hunt in and they need places where reptiles are allowed to live. At one time, many roadrunners made the Coachella Valley their home. But as our desert gets developed (with houses, buildings, golf courses, parking lots and shopping malls), the roadrunners have disappeared from our area. Why do you

think the roadrunners have disappeared? We had two vacant lots near our house where two roadrunners made their nests and hunted. Now there are two big homes with fences and swimming pools there. They could have died, or fled to the hills nearby. Either way, the only time we see roadrunners now is in cartoons.

The quail are adapting better than the roadrunners as our desert is developed. The quail travel in groups called coveys. A covey scavenges for seeds, ants, and tiny bugs. When houses are built, quail can feed on the seeds and bugs brought in new soil to build houses and from the gardens people plan. Instead of being scared away by new houses and different plants and animals,

the quail use man-made buildings, and new trees for protection. This year the male and female who live in our yard had about 20 babies. Last year there were about 12. They seem to be doing very well.

It is nice to see the quail adapt well to their new habitat, but on the downside, we no longer see any roadrunners. Has this happened in your part of the desert? Do you no longer see animals that were once there? I would like to hear about any animal that might have disappeared because of new building.

Write to:

Desert Kids' Corner, Paul Jeffrey American Desert Magazine P.O. Box 1303 Desert Hot Springs, CA 92240



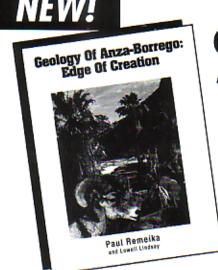
DESERT ANIMAL OF THE MONTH: CHUCKWALLA



Photo by P. M. Smiley

When most people hear the name chuckwalla, they aren't sure what to think. What is a chuckwalla? Well, a chuckwalla is a large lizard that lives in the deserts of southern California, southern Nevada, and western Arizona. Its odd name comes from the name chaxwal which was what the Cahuilla Indians of southern California called it. Chuckwallas were often hunted by the Cahuilla Indians in the Colorado Desert for food.

Today we don't hunt them for food, and if we did we'd have a tough time catching them. Chuckwalla are easily frightened, and will often find large crevices in rocks to wedge themselves in. After finding a good crevice, they inflate themselves like a small balloon until they cannot be moved. They will remain this way until they are sure that there is no danger. When not in danger, they spend most of their time sunning themselves on rocks and searching for flowers and leaves to eat. Chuckwallas usually have a pale yellow or gray colored skin (or both). They can be over a foot long and have large thick tails, and a fat body.



GEOLOGY OF ANZA-BORREGO: EDGE OF CREATION

Paul Remeika and Lowell Lindsay. ISBN 0-932653-17-0 Retail \$12.95

fascinating introduction to one of the most active seismic regions in North America where new earth crust is created as the Baja peninsula (and Borrego) splits from the mainland. Eight field trips journey through deep time in the desert, illustrating major themes of earth science. Numerous maps, photos, and diagrams lend understanding to the exciting story.

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The Name Giver

by John R. Beyer

Colonel John C. Fremont was a man obsessed with gaining personal fame in the early days of the American West. He was so desperate to make a mark in history that he often traveled far out of his way just to explore new regions for the off chance of finding something no one else had.

Fremont was the first person to engineer accurate maps of routes into the Far West form the pioneer towns of the Mississippi Valley. was destined for greatness and soon would earn the title "Pathfinder", a name he surely deserved since he was the most prolific explorer of his time. But there was another side of Fremont that is not generally recognized. He was an ardent botanist and never missed a chance to search for and locate new forms of plant life that he wasn't familiar with. In this new country they called the "unexplored West" there were ample opportunities for a scientific-minded man such as John C. Fremont.

In the spring of 1844 Colonel Fremont along with his men were returning from an expedition into the Oregon Territory when he decided to change routes and do some

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can be obtained for \$5.00 per issue as available. CALL: (619) 329-7762 exploring in the region of Southern California. He traveled southward through the San Joaquin Valley, then up and over the Tehachapi Mountains, then followed the mountains that line the Cajon Pass and exited into the great Mojave region. Here in this huge desert he and his group stayed approximately three weeks and writing in his journal he reported descriptions of trees, flowers (the spring wildflowers were in full bloom), geologic features, encounters with stray travelers (gold seekers and early settlers), and with bands of Indians he visited.

In this diary/journal of his he also gave names to particular items he came across. There is the Fremont's phacelia, Fremont's chaenactis, Fremont's cottonwood, Fremont's syntrichopappus, and one can not forget the small tree with large vellow flowers he named the Fremontia. He is also credited with naming the Great Basin, Owens Valley, the Golden Gate, and last but not least the area in which he found himself traveling this spring of 1844, the Mojave River basin. Of course, being Colonel Fremont he could not spell the area as it would be later by the Spanish but placed two "h's~ in the word; Mohahve.

As history reminds us, Fremont went on to become the famous man he so earnestly desired but it is his unbashful trait of name-giving that he may be best known for in the areas he traversed in those early days of California.

John R. Beyer is a free-lance writer who lives in Victorville, California.

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