

**Special
Section**

INDIAN ARTS: Baskets, Horsehair Miniatures, Rugs

arizonahighways.com AUGUST 2004

ARIZONA HIGHWAYS

**Japanese-
style**

Outdoor Adventure

**Hike
to the
River's
Source**



20

COVER/PORTFOLIO

Seeking the Water's Source

In the Japanese tradition of *sawanobori*, a writer and photographer hike up the East Verde River near Payson to locate where the stream begins.

18

HISTORY

Rocks for Lunch, Anybody?

Through the years, Bisbee copper miners secretly brought up bits of fluorescent campbellite in their lunch buckets — and now the rare minerals are valuable collectibles.

6

SPECIAL INDIAN ARTS SECTION

Native American Originality

There's a quiet, unique world in Arizona where artisans go about the tedious work of making fine treasured items as their ancestors have done for generations. In this issue, we feature Tohono O'odham horsehair weavers, Pima basket makers and Navajo rug weavers.

8

The Horsehair Weavers

After long and wearisome toil, the results are miniature marvels.

10

The Basket Makers

As the natural materials come together in form, an ancient legacy is passed on.

14

The Rug Weavers

The work is not just about producing "objects" — it's about family and life.

36

TRAVEL

Hideaway for Outlaws and Mountain Lions

The Santa Teresa Mountains once sheltered desperados — and the rugged range still makes a good home for cougars.

30

BIRDING

A Rich Avian Habitat

With its life-sustaining water east of Kingman, Truxton Canyon harbors dozens of bird species in a hearty environment.

[THIS PAGE] Bright yellow members of the snapdragon family, seep-spring monkeyflowers abound along the banks of the East Verde River in the Tonto National Forest northeast of Phoenix. See story, page 20.

[FRONT COVER] With its flow condensed to a slender waterfall, the East Verde River traverses a glade nourished by its moisture and sculpted by the current during seasonal floods.

[BACK COVER] Dwarfed by its neighbors, a young Douglas fir tree tipped with new growth celebrates regeneration and survival within the ponderosa pine forest of the Tonto National Forest.

ALL BY JACK DYKINGA

{also inside}

46 DESTINATION

Meteor Crater

In the early 1900s, an entrepreneur dreaming of mineral wealth tried unsuccessfully to mine the crater for its ore.

42 BACK ROAD ADVENTURE

A leisurely ranch road between Show Low and Taylor reveals scenic fishing country and an old schoolhouse in eastern Arizona.

48 HIKE OF THE MONTH

Well-conditioned Grand Canyon adventurers who seek challenges love the Nankoweap Trail, once described as "perfectly frightful."

2 LETTERS & E-MAIL

3 TAKING THE OFF-RAMP

40 HUMOR

41 ALONG THE WAY

A wise saguaro left a lasting impression on an appreciative youngster.



POINTS OF INTEREST FEATURED IN THIS ISSUE

{more stories online}

at arizonahighways.com



GENE PERRET'S WIT STOP

Our author gives up a ball game to offer his wife some important input on selecting wallpaper.

ONLINE EXTRA

Boat Camping

Along the lower Colorado River, overnights join bighorn sheep, burros, bullfrogs and birds for an outdoor experience.

WEEKEND GETAWAY

Williams

A tiny mountain hamlet's recreation opportunities make it much more than a Route 66 stopping point.

EXPERIENCE ARIZONA

A listing of major events in the state is available online.

{arizona highways on television}

Watch for this independently produced television show inspired by *Arizona Highways* magazine. The weekly half-hour show airs in Phoenix, Tucson and Flagstaff in both English and Spanish.

Robin Sewell, a veteran television news anchor and reporter, hosts the show.

English show times: 6:30 P.M. Saturdays on Channel 12 in Phoenix and on Channel 2 in Flagstaff, and at 4:30 P.M. Sundays on Channel 9 in Tucson.

The show airs in Spanish on Channel 33 in Phoenix, Channel 52 in Tucson and Channel 13 in Flagstaff. Check the stations' listings for times.

ARIZONA HIGHWAYS

AUGUST 2004 VOL. 80, NO. 8

Publisher WIN HOLDEN
Editor ROBERT J. EARLY
Senior Editor BETH DEVENY
Managing Editor RANDY SUMMERLIN
Research Editor MARY PRATT
Editorial Administrator CONNIE BOCH
Administrative Assistant NIKKI KIMBEL
Director of Photography PETER ENSENBERGER
Photography Editor RICHARD MAACK
Art Director BARBARA GLYNN DENNEY
Deputy Art Director BILLIE JO BISHOP
Art Assistant PAULY HELLER
Map Designer KEVIN KIBSEY

Arizona Highways Books
WitWorks' Books
Editor BOB ALBANO
Associate Editor EVELYN HOWELL
Associate Editor PK PERKIN MCMAHON
Production Director CINDY MACKEY
Production Coordinator KIM ENSENBERGER
Promotions Art Director RONDA JOHNSON
Webmaster VICKY SNOW

Circulation Director HOLLY CARNAHAN
Finance Director ROBERT M. STEELE
Fulfillment Director VALERIE J. BECKETT
Information Technology Manager
 CINDY BORMANIS

**FOR CUSTOMER INQUIRIES
 OR TO ORDER BY PHONE:**
 Call toll-free: (800) 543-5432
 In the Phoenix area or outside the U.S.,
 Call (602) 712-2000
Or visit us online at:
 arizonahighways.com

For Corporate or Trade Sales:
Sales Manager HELEN THOMPSON
 Call (602) 712-2050

E-MAIL "LETTERS TO THE EDITOR":
 editor@arizonahighways.com
Regular Mail:
 Editor
 2039 W. Lewis Ave.
 Phoenix, AZ 85009

Governor Janet Napolitano
Director, Department of Transportation
 Victor M. Mendez

ARIZONA TRANSPORTATION BOARD
Chairman Bill Jeffers, Holbrook
Vice Chairman Dallas "Rusty" Gant, Wickenburg
Members Richard "Dick" Hileman,
 Lake Havasu City
 James W. Martin, Willcox
 Joe Lane, Phoenix
 S.L. Schorr, Tucson
 Delbert Householder, Thatcher

INTERNATIONAL REGIONAL MAGAZINE ASSOCIATION
 2001, 2000, 1998, 1992, 1990 Magazine of the Year
WESTERN PUBLICATIONS ASSOCIATION
 2002 Best Overall Consumer Publication
 2002, 2001 Best Travel & In-transit Magazine
 2003, 2000, 1999, 1998, 1997, 1995, 1993, 1992
 Best Regional & State Magazine

**SOCIETY OF AMERICAN TRAVEL WRITERS
 FOUNDATION**
 2000, 1997 Gold Awards
 Best Monthly Travel Magazine

Arizona Highways® (ISSN 0004-1521) is published monthly by the Arizona Department of Transportation. Subscription price: \$21 a year in the U.S., \$31 in Canada, \$34 elsewhere outside the U.S. Single copy: \$3.99 U.S. Send subscription correspondence and change of address information to *Arizona Highways*, 2039 W. Lewis Ave., Phoenix, AZ 85009. Periodical postage paid at Phoenix, AZ and at additional mailing office. POSTMASTER: send address changes to *Arizona Highways*, 2039 W. Lewis Ave., Phoenix, AZ 85009. Copyright © 2004 by the Arizona Department of Transportation. Reproduction in whole or in part without permission is prohibited. The magazine does not accept and is not responsible for unsolicited materials provided for editorial consideration.

PRODUCED IN THE USA

such as "ain't," certainly is beneath you.
 One of the old, crusty, retired English teachers of seventh-grade students,
 Dorothy M. Jorgensen, Pinewood, MN
Wow! The poor old editor feels like Sister Margaret just whacked him across the knuckles with a ruler. Actually we broke three so-called cover-line rules: poor grammar, repeat of the word "Arizona" and use of a question mark. At times breaking such rules is necessary to achieve a special effect. But I also agree with Ms. Jorgensen. You can't break the rules effectively unless you know what the rules are.

Another Perspective
 "Who Says Arizona Ain't Green?" from the March issue caught my eye immediately. I grew up in Arizona, and whenever people heard where I was from, their first comment would be, "It's really brown there isn't it?" It was a great attempt at showing people that Arizona is not all brown.
 Naomi Duerksen, Lincoln, NE

Hiking to the Summit
 I recently stopped by Picacho Peak for a quick hike. Lawrence W. Cheek ("Along the Way," March '04) thought he was about 25 feet from the summit when he decided he was not "having a good time" and turned around to go back down. I, however, couldn't bear the thought of telling my Texas cohorts that I stopped to climb an Arizona peak and quit within eyesight of the top, so I finished the hike.
 Cheek was right on with his point, though: Just get out and do it instead of driving by it.
 Scott Stegall, Denton, TX

Monthly Vacation
 Our magazine arrived today and, true to form, it keeps my dream alive of a future in your beautiful state. I have loved Arizona from afar and experienced it on vacations since I was in grade school (some 35 years ago). I long for the day when I can take my *Arizona Highways* out of the mailbox and personally visit all the wonderful destinations featured. Thanks for giving me a vacation in my mind on a monthly basis.
 Joy Hanson, Green Bay, WI

Another Word Quarrel
 I am a longtime reader of your fine magazine. These past few years I keep reading of "the outback." Both my dictionaries show that to be Australian.
 Please tell your writers that they do this great country of ours a disservice by writing such nonsense. There is no outback in America.
 J.H. Amsbury, Mesa, CO

The word did originate in Australia, but it has come to be used to describe isolated rural areas, wherever they are.

Advantage Arizona
 I look forward to *Arizona Highways* each month. Arizona has something for everyone, and I hope full-time Arizonans appreciate what they have. I know there sure are a lot of people who live in other states, such as myself, who do realize what you have. Just keep up the good work! If you need my vote on making the magazine a semimonthly, you have it.
 Jeff St. John, Portland, IN

You can't imagine how much the poor old editor would enjoy putting out two magazines a month, but that's not likely for some time. Meanwhile, you can find extra original stories, photographs and columns on our Web site each month at arizonahighways.com. You also can sign up for our free monthly e-mail newsletter at the same time.

Outdoor Activities
 Your reporting of outdoor pursuits, such as backpacking and kayaking, has improved greatly over the past several years. You seem to have found some very competent people to write about these topics.
 Please don't listen to all the old fuddy-duddies who think only 20-somethings are doing these sports in Arizona. I'm 51 and backpack in the Grand Canyon at least twice a year, and in other areas, too. I also hike, backpack and mountain bike in the White Mountains, where I live.
 Many people I see on the trails, hiking or biking, are well past 50, some in their 60s and 70s.
 Elizabeth Planteen, Eagar

The Word 'Ain't'
 As beautiful as the March 2004 front cover was, it was completely ruined by the slogan "Who Says Arizona Ain't Green?" Of all the words that could have described how green and beautiful it is here, the word "ain't" isn't the one. I'm sure there are others who will agree with me.
 Carolyn McPherson, Wickenburg

I was horrified to see the word "ain't" on the cover of your March 2004 magazine. This word is low-class, crude and just poor English. Your wonderful magazine has always maintained a high standard in all areas. You can certainly do better than to place the word "ain't" on the cover.
 Eugene E. Cox, Phoenix

I was totally amazed at the cover of the March *Arizona Highways*. The title "Who Says Arizona Ain't Green?" does nothing to help teachers all over this country, and maybe other countries as well. Why stoop to that level? You certainly are not impressing anyone. Why not say it properly, "Who Says Arizona Isn't Green?" Using slang,



Air Force One — Star Attraction

Air Force One, the presidential plane, starred as the subject of four recently published books. The aircraft was also the subject of a PBS special, and provides cliff-hanger thrills in a Harrison Ford movie still popping up on television. So it's no surprise that an early version of Air Force One—the DC-6 that was the last piston-driven aircraft used by Presidents John F. Kennedy and Lyndon B. Johnson—is a star attraction at the Pima Air and Space Museum in Tucson. It's also the only plane on display

Nuggets of Dental Gold Filled Prospectors' Dreams With Hope

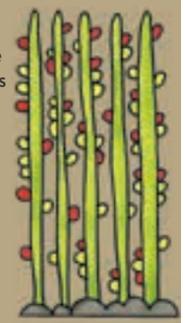
In January 1935, a man missing for 85 hours staggered out of the Superstition Mountains, weak and nearly incoherent. But prospector Charles Williams didn't need to say much to attract attention—he was carrying a pound and a half of nearly pure gold.
 The *Arizona Republic* reported that news of Williams' rich burden spread rapidly, and the sheriff's office was thronged with old-timers made speechless at the sight of the gleaming nuggets. Williams, 41, said he had "at least 20 pounds more like it" cached in the hills.
 At this time in history, American citizens could only possess 5 ounces of gold, and Williams promptly turned his in to the authorities. Certain that he could relocate the treasure trove again, Williams returned with some friends and searched the mountain, but he was not successful.
 The newspaper marveled that Williams had emerged alive from the deep rock gorges of the "mystic Superstitions," which had swallowed many other miners on the trail of the Lost Dutchman's gold.
 Several months after the find, the U.S. government claimed all of Williams' gold, which turned out to be primarily dental gold. Williams never changed the story he told on January 8, that he'd found the nuggets in a cave.
 Maybe an enterprising dentist was planning for his retirement. And if so, no one knows whether he found his way back to the cave or not.



that the public may enter.
 "This isn't the plane that Johnson and Jackie Kennedy flew back from Dallas on after JFK's assassination," explains a guide. "That was a jet. Jet aircraft were functional then, but most runways weren't yet equipped to handle them. Thus Kennedy and Johnson did much of their domestic travel aboard this particular plane."
 Sprawled over 80 acres of desert landscape 12 miles southeast of downtown Tucson, the indoor-outdoor Pima Air and Space Museum contains more than 250 historic aircraft, both military and civilian.
 But the question most asked by visitors entering the gate remains, "Where's Air Force One?" The self-supporting museum at 6000 E. Valencia Road (2 miles north of Interstate 10, Exit 269), is open daily (except Thanksgiving and Christmas).
 Information: (520) 574-0462; www.pimaair.org/pasmhome.shtml.

Living Fences

They still build "living fences" in Tucson. Limbs from skinny, sky-reaching ocotillos are planted into the ground with a bit of wire added. Water them and magic happens. The limbs take root, the stalks sprout leaves and when the weather cooperates, the fence blooms red.
 "Two guys, that's all it takes," says Bryck Guibor whose company installs living fences. He follows the tradition of early settlers forced to make-do on a tree-deprived piece of Sonoran Desert landscape. They used the ocotillos for fencing.
 Today's living fences still cost only about \$7 per running foot.
 An added ecological benefit comes with the renewable quality of the resource. The ocotillos providing the limbs don't die in the effort but continue to live and to produce future if somewhat prickly fences.
 Information: (520) 326-9192.



THIS MONTH IN ARIZONA

1872
 Residents of Phoenix go without bread for a day after a dog spills the lone baker's yeast.

1878
 Yavapai and Mohave counties ship \$160,000 in silver bullion to San Francisco.

1907
 President Theodore Roosevelt announces that Arizona and New Mexico will have separate statehood.

1908
 A new ordinance goes into effect, and Tempe experiences its first "dry" Sunday.

1911
 U.S. Senate grants statehood to both Arizona and New Mexico. A day later, the U.S. House of Representatives backs the Senate's statehood decision.

President William Taft vetoes the action to give Arizona statehood on the basis that judiciary recall by popular vote is unacceptable.

1917
 Pima County sheriff uses \$20,000 worth of contraband liquor to water the courthouse lawn.



Apache Rain Song

A cloud on top of Evergreen Mountain is singing, A cloud on top of Evergreen Mountain is standing still. It is raining and thundering up there, It is raining here. Under the mountain the corn tassels are shaking, Under the mountain the slender spikes of child corn are glistening.



Pistachio Panache

The first experimental crops of pistachios brought to the United States were planted in California and Texas as early as 1854. But it wasn't until 1970 that pistachios began their claim to fame as a prominent Arizona crop. Today Arizona farmers harvest more than 5 million pounds of pistachios in August and September, 90 percent of which is

processed by The Arizona Pistachio Co. in the tiny community of Bowie. The state comes in second in U.S. production of this humble little nut, and the pistachios coming out of southern Arizona are gaining recognition worldwide for their sweetness and dark-green coloration.

"We're very proud of our pistachios," said Dean Garrett, president of The Arizona Pistachio Co. "The altitude at 3,700 feet, the dry, hot summers and the cold winters are ideal conditions for pistachio trees."

The trees—native to Western Asia and Asia Minor—can now be found in growing numbers with more than 125,000 trees on more than 1,000 acres at the company's orchards alone.

Information: toll-free (800) 333-8575; www.azpistachio.com.

Buckle Up for a Probe Into Space

Next time you're in Flagstaff, take the short drive up Mars Hill to Lowell Observatory, the location from which a diligent astronomer discovered Pluto in 1930. The observatory continues to be a leader in astronomical research while providing innovative opportunities for the public to learn about astronomy—and

we're not talking stargazing here.

"Discover the Universe" is the theme for the newly opened exhibits in the visitors center exhibition hall.

Through interactive computer stations at the "Explore the Universe" exhibit, you can launch a virtual spaceship from Earth and select its traveling speed. The ship takes off on a tour of the solar system, the Milky Way galaxy and other galaxies.

At the fastest speed selection, 10,000 light-years per day, the ship will zoom by Saturn and its moon Titan in 4 seconds, but it will take 15 years to get to distant galaxies and to reach the observable limit of the universe—375,000 years.

Since you probably can't stay that long, you can come back in a few weeks or a few years and check on your ship or one launched by someone else, and find where it is on its way to some faraway galaxy.

Information: (928) 774-3358, www.lowell.edu.

Mad About Meteorites

Travelers along Interstate 40, 35 miles east of Flagstaff, might mistake a strange rock tower for an ancient Indian pueblo, but it was the dream of Dr. Harvey Nininger, real-life meteorite detective.

Nininger, a biology professor in Kansas when the meteorite bug bit him, spent his next 50 years traveling the world collecting meteorites. He found many of his specimens near Meteor Crater, and eventually made a deal with the Barringer family, owners of Meteor Crater, to pick up meteorites and give half of his finds to the family.

By the 1930s, Nininger had leased a small building on U.S. Route 66



(now I-40) where he opened the American Meteorite Museum. After adding a 25-foot tower, he charged visitors a quarter to view his collection, climb the tower and gaze at the rim of Meteor Crater, 5 miles away.

When visitors wanted a closer view of the crater, Nininger would say "go ahead," giving the impression this, too, was included in the admission price. After a rough drive, the unlucky visitor found Meteor Crater privately owned and paid another quarter to see it up close.

Nininger closed his tower and museum after 15 years, but kept hunting for meteorites until he died in 1986 at the age of 99. Part of his collection of some 6,000 specimens from at least 690 meteorite falls is now in the Museum of Natural History in London, while the rest is in Arizona State University's Center for Meteorite Studies.

See related story on page 46 of this issue.



Revisit Casablanca in Flagstaff

Who can forget the dramatic finale of the movie *Casablanca*? At the fog-wrapped airport, Humphrey Bogart consoles Ingrid Bergman with those memorable words, "We'll always have Flagstaff." Maybe that's not exactly how it went, but it could have. Some of the cinematic classic was filmed in Flagstaff's historic Hotel Monte Vista.

"Several scenes in Bogart's apartment were actually rooms in the hotel," says Chris Hartzog, front desk manager at the Monte Vista. "We don't know which ones specifically because documentation

was lost, but you can sleep in Bogart's old room."

Or guests can saw logs where Spencer Tracy, Gary Cooper, Carole Lombard or Bob Hope stayed. Opened in 1927, Hotel Monte Vista was frequented by Hollywood A-listers filming in Sedona.

And like all historic hotels worth their linens, the Monte V is haunted. Restless spirits include a phantom bellboy and a rocking woman. No reports of a hangdog-faced ghost urging Sam to play it again.

Information: (928) 779-6971 or toll-free (800) 545-3068; www.hotelmontevista.com.

A Feast Like No Other

Billy Cook, a resident of Nogales during the 1890s, was quite a generous man. He went hunting and came home with enough meat to share with his neighbors.

The neighbors were impressed with his hunting skills. He left a small piece of the pelt on his front porch, and by the look and feel of the fur the neighbors decided that it had to be a silvertip grizzly bear, and that would explain the abundance of meat.

The generous distributions were consumed and compliments passed on how tender and delicious the bear had been.

It wasn't until later that neighbors spotted the entire hide of the animal bunched up and hanging on Cook's fence. Unable to control their curiosity, they spread the hide out to get a look at the creature Cook had killed.

Imagine their surprise to find that the "silvertip grizzly" had four long legs, hooves and very long ears.

Their delectable gift horse was a burro.

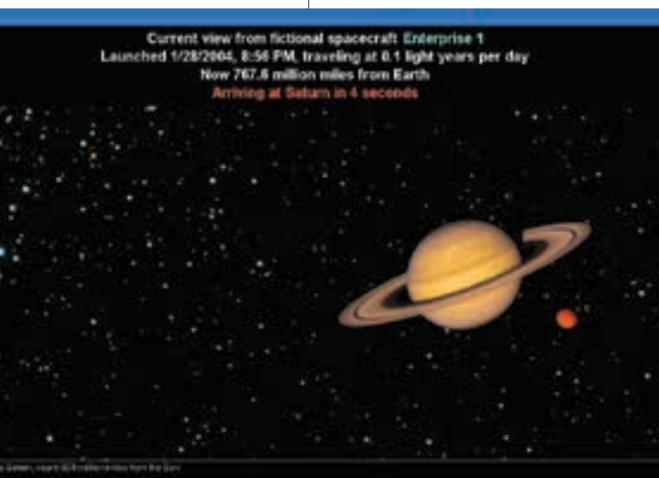


Question of the Month

Arizona has become synonymous with cotton production, but which **nonplant fiber** also keeps the state in the record books?

A Angora goat herds in Arizona rank second only to Texas in the production of domestic **mohair**. The goats' long, fluffy hair, otherwise known as mohair, gets clipped twice a year and can be spun into **luxurious threads and yarns**. Last year alone, Arizona produced 140,000 pounds of the desirable fiber.

- CONTRIBUTORS**
LEO W. BANKS
RON BUTLER
ROBIN N. CLAYTON
JANET WEBB FARNSWORTH
LISA NATHAN
ROGER NAYLOR
MARY PRATT
KATHLEEN WALKER

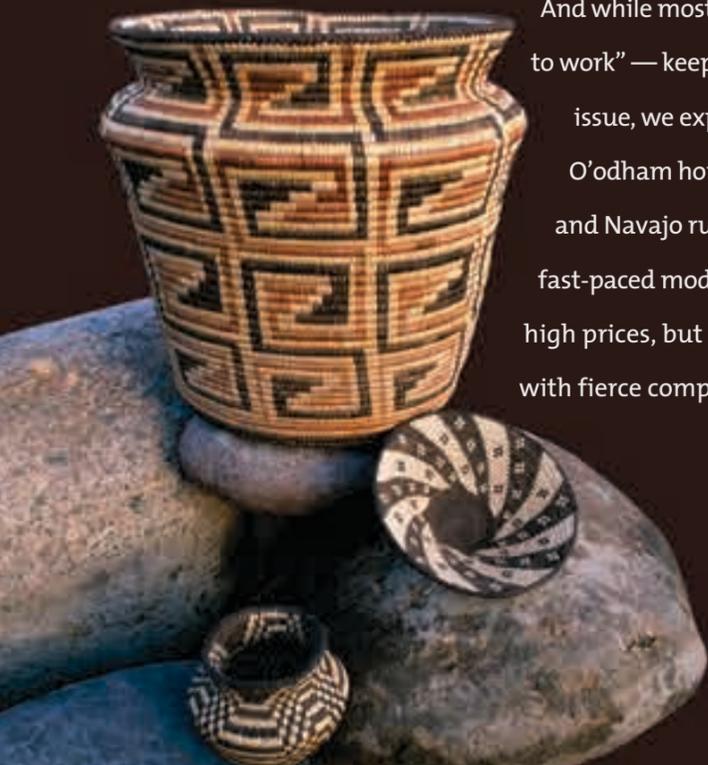


INDIAN ART

The Tradition Lives On

TO PARAPHRASE ONE TRADITIONAL NAVAJO RUG WEAVER, the act of creating a fine, authentic piece of native art is not just work, it's an expression of family and life. Indeed, for many Indian artisans in Arizona, making objects as their ancestors have done for centuries is a way of conveying deep spirituality. ✚ The seemingly endless hours — sometimes weeks or months — that go into a single crafted item enable some Indian artists to earn a living and continue the legacy of creating. Many family elders pass their skills and designs on to their children and grandchildren. ✚ The artists seem to have certain things in common: They toil slowly, and tedious handwork is the norm. Modern technologies rarely apply.

And while most work to earn a living, many also “live to work” — keeping the old ways intact. ✚ In this issue, we explore the quiet worlds of Tohono O'odham horsehair weavers, Pima basket makers and Navajo rug weavers. They pursue their art in fast-paced modern society, which sometimes brings high prices, but also threatens cherished traditions with fierce competition from imitators. ✚



An O'odham Family's Heritage Thrives in Delicate Miniature Art



Geneva Ramon's strong fingers, sporting nicks in various stages of healing, deftly tie two knots in a small coil of black horsehair. Threading a single hair on a medium sewing needle, she pushes the needle between the diminutive rows of the tiny tray she is weaving. Holding the 1-inch spiral in one hand, Ramon pulls the needle through and around, winding the doubled hair around the outside coil of whitish hair that feels more like waxed nylon fishing line than what used to hang from the tail end of a horse. "I go through a lot of needles," she says with a shy smile.

HORSEHAIR WEAVINGS

text by DEBRA UTACIA KROL
photographs by JIM MARSHALL



[OPPOSITE PAGE, ABOVE AND BELOW] Tiny horsehair baskets woven by Geneva Ramon and her daughters represent a continuing tradition of five generations in the Tohono O'odham Indian community. [RIGHT] Weaving in her living room, Ramon works on several baskets at a time.



Ramon, 43, is the matriarch of a remarkable family that boasts more than 20 percent of the 50 horsehair weavers of the Tohono O'odham Nation.

When they first noticed their Mexican neighbors using fine ropes crafted from horsehair, the O'odham, with a centuries-long tradition of utilizing whatever came to hand to survive in the harsh Sonoran Desert, started making their own ropes. "It just evolved from there to what it is now," says Terrol Dew Johnson, co-director of Tohono O'odham Community Action (TOCA), a community development group that established the Tohono O'odham Basketweavers Organization.

For centuries tribes traded baskets, but as they shifted from traditional trade and subsistence to Western-style economies in the early 20th century, the O'odham began selling baskets to non-Indians.

Ramon says O'odham women first started using hair from horses' tails for miniature baskets in "about the 1940s, I think, for the tourist trade." Johnson believes that women began making baskets, trays and fetishes as small as a baby's thumbnail even earlier, in the 1920s or 1930s.

Today, frog, mouse, cat and turtle fetishes vie with diminutive O'odham trays and baskets for collectors. Bob Nuss, who owns Drumbeat Indian Arts in Phoenix, says that most horsehair products sell to non-Indian collectors and tourists.

"I've had cats and mice in here before, but what the local Indian community wants are horsehair earrings and bola ties," says Nuss, who advises potential buyers to look for tight stitches, neat patterns and straight coils.

"My grandma and my mom did baskets," says Ramon, who started weaving at age 11. "First I learned how to weave yucca. Then I learned horsehair."

Ramon expertly splices a 3-foot strand of hair onto the coil, forming the foundation for another petite version of the yucca and bear grass baskets once used by the O'odham for storing, preparing and cooking food. "We would shake out corn and wheat, and shake corn kernels and hot coals into the basket to bake it," Ramon says.

"Knowing what people did to survive, most of my students don't know that baskets weren't made to sell, but to use in daily life," Ramon adds. The acclaimed artist

demonstrates her art at TOCA's Sells store and at workshops across the Southwest. She used to teach basketry at Ha:san Preparatory & Leadership School in Tucson.

Gathering and preparing native plants for more traditional O'odham basketry requires days of arduous labor. "We have to wear long sleeves and gloves to keep from getting scratched or bitten by bugs or stung by scorpions," says Ramon's daughter Faith, 19. This may account for horsehair's popularity.

Ramon used to cut the tails from wild horses. "It takes two or three washings to get all the dirt out," says Faith — not to mention the hazards inherent in yanking hair from a horse's tail. But horses in the Sells area can rest easy these days; Ramon now purchases horse hair from Tandy Leather.

Johnson says that Ramon's baskets helped support her through many tough times. "Her baskets paid her way through nursing school." Today, the bulk of Ramon's income comes from weaving, rather than nursing.

Ramon says, "If I finish a 6-inch squash blossom tray and it looks straight, Terrol will buy it for \$1,200 to \$1,500." Ramon's smaller trays sell for around \$250. However, a mouse that rests easily on a dime sells for as little as \$12 at Indian art markets.

It takes Ramon three months of "working when it's quiet" to produce a 3-inch tray with the Man-in-the-Maze pattern; a 1-inch-high kitten, complete with whiskers and tail, takes an entire day to produce.

Ramon also crafts earrings and necklace pendants, such as the set she recently completed for the wife of former Tohono O'odham Nation Chairman Edward D. Manuel.

Ramon works her horsehair magic from her gray stucco home in Sells. A ladder scrounged from a bunk bed leads Ramon's grandchildren, nieces and nephews up to a treehouse built with scrap lumber in the crotch of a tree. The yard is landscaped "rez"

style in wild bushes and trees. Her tidy living room brims with baskets, pictures and baby paraphernalia from Ramon's growing brood.

Ramon has instilled her sense of independence in her seven daughters, who all weave. "My daughters used the money they made from baskets to pay for their own school clothes," says Ramon proudly. Her three oldest grandchildren and her mother also weave.

Ramon's 9-year-old granddaughter She-dava bounces over. "I've made three baskets now!" she cries before running off to join her cousins clustered around the treehouse.

Once every O'odham family could boast several weavers; however the number of traditional artisans has dropped dramatically. Johnson says the necessity to participate in a wage economy, the movement of Indians to cities and the continuing pressure to assimilate into mainstream society frequently contribute to a reduction in artisans in tribal communities.

"The elderlies are starting to pass on," says Ramon. But take heart: Ramon's weaving clan as well as the weaving classes at TOCA and Ha:san are helping to refuel a resurgence in traditional arts. TOCA also pays weavers far higher wholesale prices than do many dealers. This helps artisans earn enough money to make weaving their primary jobs, says Johnson. More importantly, continuing the weaving tradition helps keep O'odham culture alive and thriving.

With 12 horsehair weavers and more on the way, the Ramons can truly say they're carrying on an O'odham family tradition. ■

Debra Utacia Krol, the book editor of Native Peoples Magazine, bemoans that the only thing she can weave is words. A Salinan Indian from California, Krol now lives in Phoenix.

Scottsdale resident Jim Marshall was amazed at the weaving skill of Geneva Ramon and her ability to produce incredible art from her hectic living room. Marshall also photographed the story on Navajo rugs.

A Mother and Daughter Team Works to Keep a Creative Legacy Alive



On a hot June day, the breeze blowing through an open-sided ramada brought welcome relief to Rikki Francisco and her mother, Julia, who are Pima Indians. Francisco, in her 40s, and 81-year-old Julia live in the Gila River Indian Community just south of Phoenix. Each woman concentrated on forming the tiny intricate loops necessary to make a traditional basket. They were creating different designs and different kinds of baskets, but their methods of working were the same as those used centuries ago by the Hohokam Indians, “those who are gone.”

PIMA BASKETS

text by JANET WEBB FARNSWORTH photographs by BERNADETTE HEATH



The Pimas, who also call themselves Akimel O’odham, “the river people,” are believed to be descendants of the Hohokam.

Taking a section of cattail stalk, Francisco formed a small tight coil. She then began to wrap the cattail with strips from a willow shoot. Using an awl, she pushed a strip of willow between the coils, then tugged it through and looped it under the coil, and repeated the process much like wrapping string around a stick. In ancient times, awls were made of bone or flint.

Gradually, she increased the coil, wrapped it in willow as she progressed, until a basket began to form. These cream, black and red willow bands that formed the design came from willow branches that I watched Francisco cut three months earlier on the Salt River below Stewart Mountain Dam northeast of Phoenix.

I have followed Francisco’s creation of this basket from the beginning—choosing the design, gathering and preparing the willows, cattails, devil’s claws and roots of ratany, a low-growing shrub. Francisco’s miniature baskets, sometimes less than 4 inches in diameter, are prized not only for their beauty and workmanship but also for the traditional way they are made.

As she gathers the natural materials, Francisco uses methods handed down by her ancestors to complete each step in its time, in its season. In her baskets, the past and present blend in smooth succession as she applies lessons passed from mother to daughter, generation after generation.

The tradition of basketmaking runs strong in Francisco’s family. Both of her great-grandmothers and her grandmother Vivian Francisco, as well as her mother, Julia, made beautiful baskets.

Francisco says, “When I was born, my grandmother delivered me, and I feel that when her hands touched me, she somehow passed her basketmaking skills on to me.” When Francisco was 24 years old, she learned to make baskets from Julia and has spent years refining her talent.

Today, Pima baskets are valuable works of art, displayed in museums and favored by collectors. But a hundred years ago, they served practical needs. They were used to gather saguaro fruit and cholla buds and for winnowing wheat. Few of the old baskets remain.

When we first met, I asked Francisco where she found the motifs she carefully weaves into her baskets. “I study old photos or look at the baskets in museums and



[OPPOSITE PAGE, ABOVE AND BELOW] The skilled hands of Pima Indian basket maker Rikki Francisco deftly apply techniques handed down through generations to weave ancient designs into her creations. Francisco’s basket patterns sometimes reflect rock art found in the SanTan Mountains of the Gila River Indian Community.

[ABOVE] Francisco weaves with her mother, Julia, who taught her the skills that she learned from her mother and grandmother.

designs on Hohokam pots,” she answered.

“Sometimes I find a design on a piece of pottery, and I figure out how to incorporate that in my weaving.”

To show me what she meant, she took me to Snaketown, a large Hohokam site a couple of miles from her home. There, thousands of pottery shards littered the ground. The village was abandoned around A.D. 1450, but the pottery colors are still bright after centuries of exposure to the elements.

We spent the afternoon wandering the mounds and arroyos of the ancient site, looking at the shards as a stiff wind blew tiny dust storms around our legs. Francisco smiled when she spotted a piece of white pottery with a red circular design.

“That one is the whirlwind design,” she explained. “I use that design often because it is my traditional Indian name [“Whirlwind”]. My mother said she called me that because I could not sit still. I was always moving about like a little whirlwind.”

Francisco then took me to see the historical baskets at the Gila River Arts and Crafts Center. Many of them feature a squash blossom design in the center, a favorite theme

among Pima basket makers. We also visited the Hu Hu Kam Memorial Hospital at Sacaton, where more baskets—some of them Francisco’s and her mother’s—were displayed.

In addition to using ancient designs and techniques, the gathering of materials in the traditional way plays a key part in the creation of Francisco’s baskets. The spring flowers were in bloom in April when I went with her to the Salt River to cut willows. Turkey vultures with outspread wings lazily rode the wind currents above us.

Francisco took her time. Sunset had started to cast light on the tops of the craggy cliffs before she located a clump of willows that met her requirements. There, with only the soft sounds of the gently flowing river and a few birdcalls to interrupt the silence, I watched as she murmured her thanks in the Pima language.

She chose only the youngest new shoots because the branches must remain pliable. Watching as she carefully cut the willows to avoid mutilating the plant, I was struck by the ageless scene. Francisco’s ancestors must have performed this ritual a thousand

years ago, when they gathered willows for their own baskets.

Before we left, Francisco stepped out on the cobblestones of the riverbank. From a buckskin bag decorated with red and yellow beads, she took a seed offering and scattered it on the current. As if on a cue, five herons flew past only a few yards away, barely skimming the water. I held my breath, afraid my presence might spoil the moment and Francisco's close feelings for the Earth.

Near sunset on another April night, I followed Francisco into the Sacaton Mountains to gather the dark roots of a ratany plant. She would use these roots to dye the light-colored willow branches a deep reddish brown.

This time, Francisco turned to face the sunset as she sang a traditional song. A slight breeze ruffled her long black hair as she stood silhouetted against the fiery sky. She

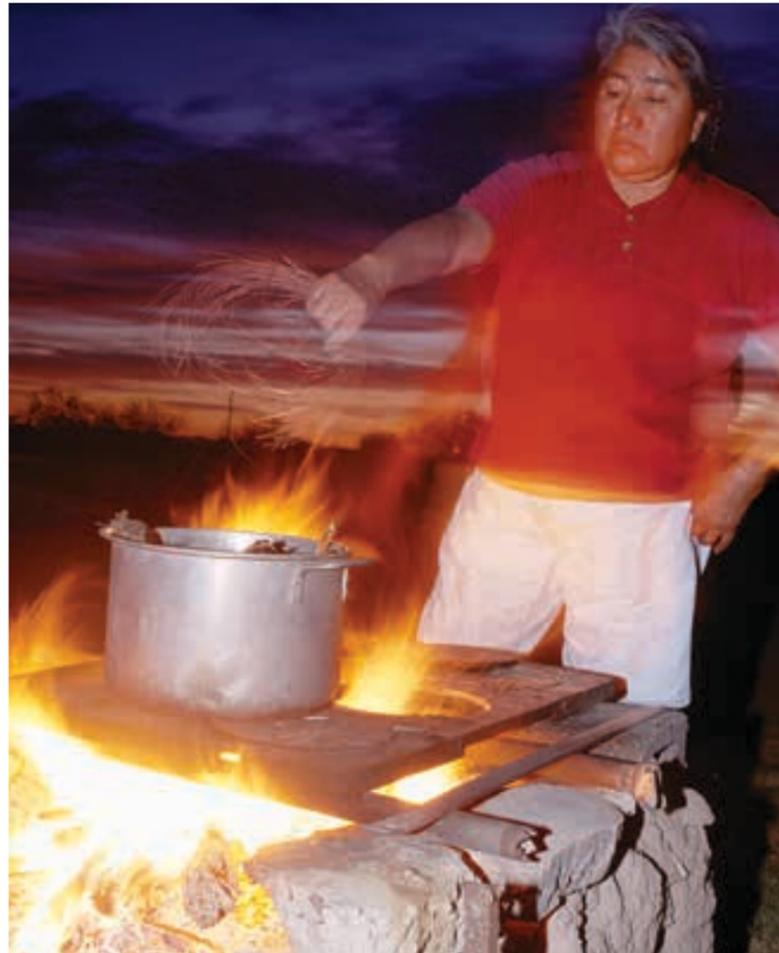
bent to place the seed offering around the plant before digging the roots and, after she was finished, carefully smoothed away all signs of displaced soil. The wind and rain would erase any evidence the earth was ever disturbed.

Back home, Francisco built a fire in an outdoor adobe fireplace and placed the ratany roots into a large pot of water on a rack above the orange flames. She shoved a chunk of mesquite wood into the fire, and sparks scattered like a miniature fireworks display. When the ratany and water boiled, she pushed the dry willow strips in and let them boil for several hours until they reached just the right shade of red.

While the willow soaked and absorbed the color, we sat by the warm fire and smelled the aroma of burning mesquite. The scene was pleasant and relaxing, but Francisco seemed worried. She wondered if the old

traditions would someday fade away. To help keep the skills alive, Francisco teaches basketmaking to tribal members, but she warns them, "It is not something that you can pick up easily. Along with a natural ability, you must be willing to put in the years of practice, have the patience to learn and the artistic eye to see design."

Francisco's love of her culture is obvious. She told me about going into the mountains with a photographer to shoot some of her baskets next to ancient petroglyphs. As they prepared to take the pictures, Francisco glanced farther up the mountain and spotted a large rock covered with petroglyphs of people, animals and geometric designs. Alone, she climbed up to the petroglyphs, spent time meditating and then brought her baskets and the photographer up. In front of the petroglyph-covered rock lay a large flat stone, almost like a table that



[CLOCKWISE FROM TOP LEFT] Forsaking modern tools, Francisco follows the old ways of basketmaking after gathering the needed ratany and cattails. **[OPPOSITE PAGE]** On a quiet spring morning, she cuts the slender willow branches that form her baskets.

had been placed there to hold her baskets.

As we sat by the fire, Francisco brought out the devil's claws she had already gathered. The large black seedpods with long curled "claws" loosely connected to form a black ball about 18 inches in diameter. She pulled thin strips from the plants. Later, she would soak them in water, making them more pliable, before using them to form the black part of the design in her basket.

In late May, Francisco sent me word the cattails were ready to cut. I met her just after dawn at a pond not far from the Gila River. We were alone except for a blue heron with a broken leg and a few red-winged blackbirds. The cattails had grown tall, but their tops were a golden brown, not yet fully mature. They swayed in the gentle wind.

Francisco asked for a few moments alone to gather her thoughts, so I remained by the pond while she wandered off. As the sun came up, birds chirped and sang. A large frog jumped in the pond, startling me and sending ripples radiating in widening circles.

Francisco came back. Composed and serene, she was ready. With her grandfather's sickle, a crescent-shaped blade on a handmade wooden handle, she swiftly cut

off whole cattails. Since she needed only the stems, she used a sharp knife with a 10-inch blade to strip off the leaves, leaving woody stalks about 4 feet long. Later, she would split the stalks in half and put them on a drying rack for about four days until the shafts turned light brown and curled slightly. These would form the framework of her basket.

Francisco continued working on her basket under the shade house. Her mother, Julia, concentrated on her flat basket with a complicated Man-in-the-Maze pattern. Willow strips soaked in buckets of water beside each woman. Julia picked up cream-colored willow strips and ran a sharp knife along the edges to smooth them. Next she pulled each strand through a hole in a metal lid to make them all the same size. Before metal lids were available, the willows weren't sized as closely, and the weaving was more uneven.

The lines must be straight, the designs even. Francisco explained that the finer the willow wrap or stitches, the better the quality. Baskets like Francisco's that use three different colors are even more valuable.

More weeks of tedious work would be needed to finish the basket. Francisco makes them in all sizes, but one of her specialties

is miniatures, and the one I observed her make was just 4 inches in diameter.

I asked her what will become of this basket. "I'll sell it," she said. "It is how I support myself. Sometimes people contact me to order a basket. Other times I take my work to Santa Fe where collectors purchase baskets."

I hoped the new owner of the basket would appreciate the time and effort involved—not just the months of preparation and weaving, but the centuries of traditions passed through the generations. This legacy is on the verge of dying out, but there are a few women left who sit under shade houses, as Francisco and Julia do, quietly making beautiful baskets in the way of the ancient Hohokam. **AH**

AUTHOR'S NOTE: For information on Rikki Francisco's baskets, contact her at P. O. Box 812, Sacaton, AZ 85247.

Janet Webb Farnsworth of Snowflake was awed by the time and cultural rituals involved in each step of traditional basketmaking. She also wrote the Back Road Adventure and Destination in this issue.

Star Valley resident Bernadette Heath is happy to know that there is some purpose for devil's claws other than grabbing her socks or wrapping around her bike's tires.



NAVAJO RUGS

text by LEO W. BANKS photographs by JIM MARSHALL

For Weavers, Their Artistry is About Life and Family

Most Navajo Indian rugs come to life in places where the outside world seems a million miles away, and commerce even farther than that. Follow a weaving back to its maker and you're likely to see a cluster of hogans, maybe a corral, a pickup truck and a reservation hound chasing sheep across a giant landscape. It's good breathing



country, for sure, and in the clear morning air you can smell the coffee brewing from up on top of the mesa. But business? Out here? Yes. Amid this seeming emptiness exists a powerful creative energy that has kept Navajo weaving alive and thriving through the decades. "We're in the midst of a good market now," says Bill Malone, manager of Hubbell Trading Post in Ganado. "We're selling all kinds of rugs — Burntwaters, Ganados and Wide Ruins.

"Over the years, there's probably been a small decrease in the number of weavers, but quality rugs are still being made and in demand," says Malone

No longer a novelty, as they were viewed years ago, many buyers today prize Navajo rugs as art, and prices have risen accordingly.

A 3-foot-by-5-foot Navajo weaving in the popular Two Grey Hills design could easily fetch \$3,000. Larger rugs can bring \$10,000 and much more, depending on craftsmanship and buyer preference.

Some want rugs with traditional designs, such as the storm pattern. But the market has also driven innovation, creating a blending of styles that incorporates different regional elements into one rug.

"Traditions don't change easily, but we're seeing some artists playing with design," says Steve Beiser, owner of Puchtecha Indian Arts in downtown Flagstaff. "You also have stores and traders encouraging more creative weavings."

Traditional colors — red, brown, gray, black and white — have come back into vogue, pushing aside soft pastels, and imports, especially from Mexico, have become more prevalent, crowding some Navajo weavers out.

Mexican workers produce knockoff rugs on the cheap with designs that mimic Navajo designs. And in some cases, confusing situations arise.

A tourist shop on the interstate might advertise a Mexican rug by saying Indians of the Americas produced it. Or they might have a Navajo woman who doesn't speak English weaving in the shop; unwary customers may assume she makes the rugs.

No one browsing the high-end collector market, populated exclusively by expert buyers, is likely to confuse a Mexican rug for an authentic Navajo.

"Years ago we had to do a lot more explaining of the differences between Mexican and Navajo rugs," says Dan Garland, owner of Garland's Navajo Rug Co. of Sedona. "Most buyers today know that Mexican rugs are made on a different type loom and with a different weaving style. They just don't make good floor rugs. They're not 100 percent wool, either."

But novice tourists might get tricked into buying a low-end rug — say, around \$300 — that they've been led to believe is a Navajo original.

Also, shoppers hunting for a certain look sometimes buy a Mexican piece, knowing full well what it is, because of the

low price, due primarily to low wages paid south of the border. A 3-foot-by-5-foot Mexican rug might cost \$90, while the same-sized Navajo rug, in the identical pattern, might cost \$2,000 or more.

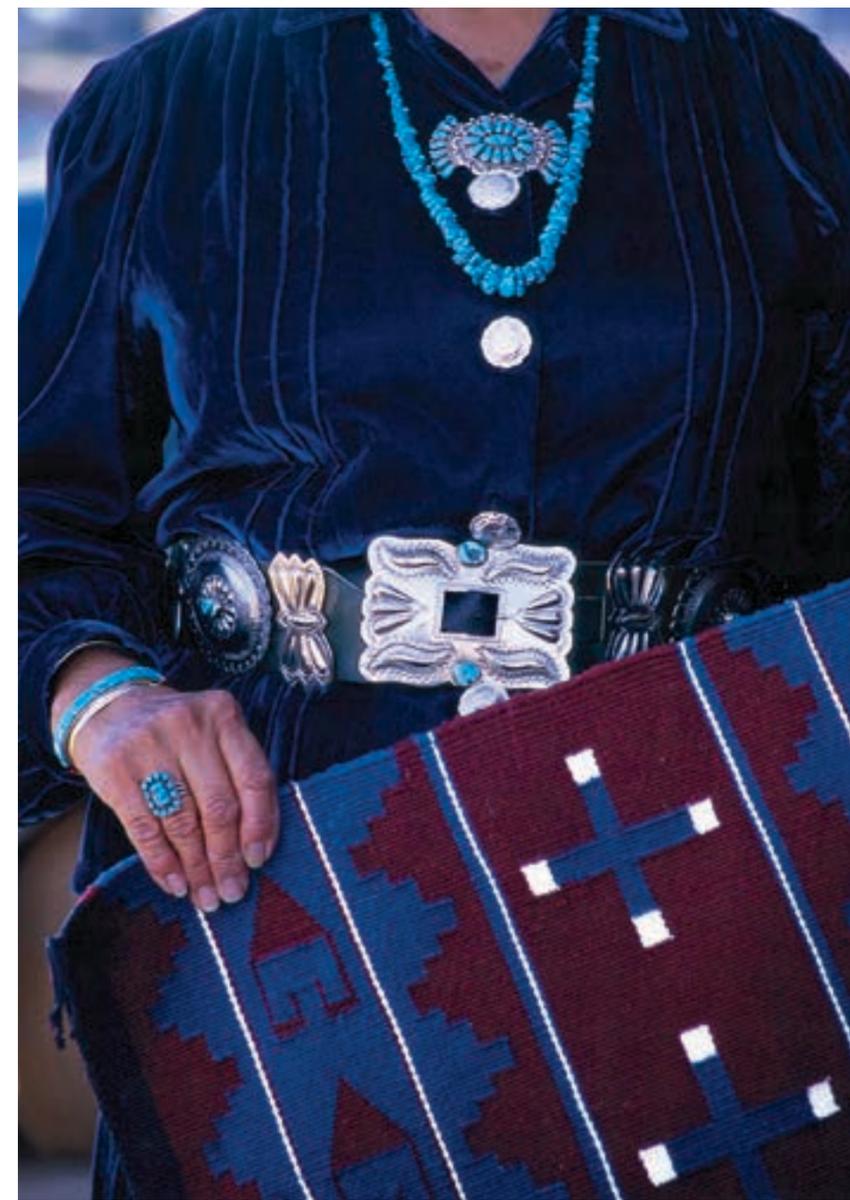
"If someone is decorating and just wants a design style, we can't compete with imports," says Malone. "I think they've hurt Navajo weavers."

Surprisingly, several traders said they don't particularly mind the imports. Bruce Burnham, who operates a trading post in

Sanders and does not sell Mexican rugs, says they fill a market niche and even boost the Navajo market by bringing Southwestern designs to a wider audience.

"The people buying those Mexican rugs, if they weren't available, wouldn't spend extra for a Navajo rug," explains Burnham. "They'd decorate with something else. To me, the imports keep the Southwest look alive."

For those interested in authentic Navajo, Kent McManis, owner of Tucson's Grey



[OPPOSITE PAGE, ABOVE AND BELOW] Following a tradition rooted in Puebloan cultures, Navajo Susan Etsitty and her contemporaries have elevated utilitarian rug-weaving to a refined and prized art form. [ABOVE] Navajo weaver Rena Begay holds a classic Chief rug outside her home in Pinon.

[LEFT TO RIGHT] Rena Begay sits at her loom holding a *be'adzoit*, or "weaving comb," used to tamp the woof yarns down into the warp. At her Scottsdale home, D.Y. Begay holds a sample of the acclaimed yarn made from her churro sheep's wool. Using three-ply Germantown wool, Mae Clark creates colorful pieces reviving a tradition that represents hope in the midst of sorrow.



Dog Trading Co., advises buyers to make sure the rug has a tight weave, is as square or rectangular as possible, and evenly shaped. The same is true of the patterning, which can tilt slightly left or right in a poorly woven copy.

He also suggests asking what part of the reservation the rug comes from. What kind of loom was used? Who's the weaver? "If they get vague or don't know, go someplace else," says McManis.

Longtime trader Ferron McGee recommends the feel and smell tests. A Mexican rug has a coarse feel, like sandpaper, and smells like acrylic yarn.

"A Navajo rug has household smells because it's been in the house for months while it was made," he says.

Competition aside, weaving is still deeply embedded in the Navajo heartland, and in Navajo hearts.

In 1986, when Mae Clark's father got sick, she left college in Flagstaff and returned home to help the family. She became a weaver. And even though she'd never worked

dad was a medicine man, and he taught me to do a Blessingway ceremony every four years as protection, and to bring my thoughts back to me." Among the Navajos, the Blessingway is probably the most deeply held of traditional healing chants.

Many weavers see their creations this way — as living things that must be approached with humility.

Before she weaves, 54-year-old Jennie Slick, of Querino Canyon, says a few special prayers to put her in balance. Slick then describes the design getting hold of her and pulling her through the rug, and at finishing time she's as eager to see what it looks like as the buyer.

Here's a master weaver giving credit to an

begin early and end late. She and her husband rise at 4 A.M. and wait for the sun to peek over the ridge to the east. At its first appearance, they sprinkle white cornmeal and pray, then Rena gets to work, staying at it, except for lunch and dinner, until 11 P.M.

Like Clark, Rena began weaving after coming home from school in Utah in the summer of 1957. Her parents informed her that she wouldn't be returning because they'd arranged a marriage for her.

But Rena refused, never pausing long enough to learn the boy's identity. She was 17 and began weaving.

After several weeks had passed, she met Ben Henry Begay at the Pinon Trading Post, unaware that he was the boy originally chosen for her.

Rena was more interested in going back to school than in boys, and paid him little attention. Several months later, when they met again, Ben explained that he was the one their elders had picked.

Still she was unimpressed. But over the next months, Ben's persistence paid off, and Rena and Ben became a couple.

"Ben drove up one day and told me to get into his pickup truck," says Rena, now 62, laughing at the memory. "I still wanted to go back to school, but I went with him."

That was all the ceremony they had. They never did formally marry. Forty-seven years later, after raising seven kids, they have 26 grandchildren and four great-grandchildren.

Today, Ben serves as Rena's assistant throughout the weaving process, and their son Leroy, a silversmith, advises her about

which colors work best in her designs.

When the time comes to do a show, Ben and Rena, along with Leroy and his wife, Rochelle, and another son, Larry, also a silversmith, often ride together in their van. They provide each other support in a family enterprise that includes a Web site.

Technology pushes one way, tradition another.

Few weavers use Web sites. Most don't engage in that kind of modern marketing, and would prefer not to wait, perhaps for months, to make an Internet sale.

Instead they deal with the old-fashioned Indian arts trader, who, in addition to providing a crucial link between artist and marketplace, offers weavers quick cash for their work.

Dan Garland says that if he wants a large rug made — say, 6 by 9 — he sometimes pays a trusted weaver a monthly stipend of \$600 to pay bills while she's working.

The rug might take up to nine months, during which Garland pays the artist \$5,400. When she brings the rug in, she'll receive the final payment, the amount depending on quality and whether she put extra pattern in it.

"You want the weaver to get as much as she can," says Garland. "At least 50 percent of the women pay their bills from weaving."

Traders sometimes spark weaving trends.

In 1995, Burnham convinced a Pennsylvania mill operator to produce a three-ply yarn — similar to the Germantown yarn, also produced in Pennsylvania — Navajos used following their defeat by the Army in 1864. Soldiers marched the conquered

Navajos, on foot, to a prison camp at Bosque Redondo, New Mexico, where they remained until 1868.

Burnham gave this yarn to weavers with a book about that march, known as the Long Walk. It described how Navajo women, in spite of living in miserable captivity far from home, used Germantown yarn to produce a new and dazzling style of weaving.

Burnham's idea was to empower weavers to recapture the spirit of that era. It worked. "Seeing how these weavers have responded is the most exciting thing I've done in more than 40 years as a trader," he says.

When Clark talks about her Germantown rugs, she swells with pride at how Navajos endured the darkest time in their history, and still produced something vibrant and beautiful.

"The people endured hardship, starvation and cold, but never gave up," she says. "They still made rugs. To me, Germantown rugs represent freedom and the hope that something better will come along."

The Germantown revival that Burnham created, now nine years running, has produced a burgeoning market for these colorful, fringed rugs made with three-ply yarn.

The old becomes new again.

That trend also is evident in the comeback of churro sheep, a breed first brought to the New World by the conquistadores. Their numbers diminished greatly during the 1860s war, and again amid a federally enforced livestock reduction in the 1930s.

But in the early 1980s, the sheep began returning to the reservation, thanks in large part to the Navajo Sheep Project, founded

by Lyle G. McNeal, an animal science professor at Utah State University.

McNeal trucked his first large load of churro sheep back to the reservation in 1982, and knew by the reaction that this hearty breed hadn't been forgotten.

"I'd pull my truck up to a trading post and older Navajos would gather around the sheep," says McNeal. "They'd say these are the real sheep, the mother sheep. Some even cried. The churros are to the Navajo what the buffaloes are to Plains Indians."

Since then, McNeal estimates the reservation's churro population has risen to 4,000, and some 750 artisans use their wool, which is long, lustrous, not greasy and makes an especially strong yarn.

"A rug made with churro wool has a lot more body," says weaver D.Y. Begay, who lives in the Phoenix area, but maintains a churro herd near her birth home on the reservation in Tselani, southwest of Chinle. "The look is livelier and smoother, and there's a sheen on the rug."

As a girl, she heard her family talking about the long-haired sheep, and how important they were. So when D.Y. first heard of the churros' return, she jumped at the chance to start her own herd. In a way, her history and her ancestry demanded it.

"When you talk about weaving, you're not just talking about making a rug," she says. "Weaving is about family and life. Weaving is the way you live." **AH**

Tucson-based Leo W. Banks marvels at the skill and artistry of today's Navajo weavers. Jim Marshall of Scottsdale also photographed the horsehair-weaving story.

Many weavers see their creations . . . as living things that must be approached with humility.

a loom before, no one had to teach her because she'd spent her childhood watching her mother.

"Weaving was inside me all along," says the 38-year-old, now living in New Lands outside Sanders.

Today, Clark puts so much of herself into her rugs that she sometimes gets emotional talking about them. She explains that each of her rugs picks up dust from her hands, hairs from her head, and even her thoughts before being sent to customers worldwide.

"I don't know where my rugs will end up or how they'll be treated," she says. "My

unseen power for the beauty in her work. "Maybe that power comes from the design or the loom, I don't know," says Slick. "But it's there."

Clark tries to work quickly so that her rug "doesn't get restless on the loom." She might do a 3-foot-by-4-foot rug in three weeks.

To beat a show deadline, Rena Begay once did a 6-foot-by-8-foot Ganado in 42 days. Normally she works three rugs at once, either in a room off her kitchen in winter, or, in summer, inside a dirt-floored hogan beside her home, 5 miles east of Pinon.

When preparing for a show, Rena's days



BISBEE'S LUNCHBOX ROCKS

Old-time Miners Secreted Away the Glowing, Collectible Campbellite

Text by KATHLEEN WALKER Photographs by JEFF SCOVIL

THE OLD MINERS tend to smile a bit sheepishly when they talk about the lunchbox rocks of Bisbee. Or they laugh or lean into the conversation with a sparkle in their eyes at the mention of those little pieces of pretty they hid away in their lunch buckets to take home for themselves. That gleam matches the one in the eyes of collectors interested in one particular rock that may have made the ignoble ride to the top, the one called campbellite.

"It's not very impressive when you see it," Verlyn Mason said, stating the obvious as he put a gray rock the size of a small cantaloupe down on the table outside Dot's Diner in Bisbee. Mason, who spent his life not in the mines but in the military and computer science, began collecting campbellite in 1984.

"I can only equate it with gold fever," he said of his love for the rock.

Albert Sheldon worked two years in the mines before making the military his career. He put out his own display, including a few slices of the rock polished to reveal red, green and blue marbled interiors.

"Nobody knows how much they threw away," he said about the days when copper ran this town.

Bisbee mines supplied the world with more than 7.5 billion pounds of copper between 1877 and 1975. Gold, silver, lead and zinc came out of the red hills of Bisbee. Great chunks of Bisbee minerals like the vivid green malachite and neon-blue azurite made their way into museums, private collections and jewelry shops. But campbellite? Nobody ever heard of it until the late 1940s.

That's when Ray Wright brought a hunk of the rock home from his work overseeing the powder magazine in the Campbell Mine's shaft. The Campbell was the richest and the deepest mine in the district,

bottoming out at 3,600 feet straight down.

Wright had taken a black light into the mine with him and discovered what the experts were going to say was darned near impossible. The rock—the one that would be named after the shaft in which it was found—glowed. No, the rock burned, pulsed with the fire of the innards of the earth. This rock, this gray hunk of nothing much, fluoresced, and that seemed wrong.

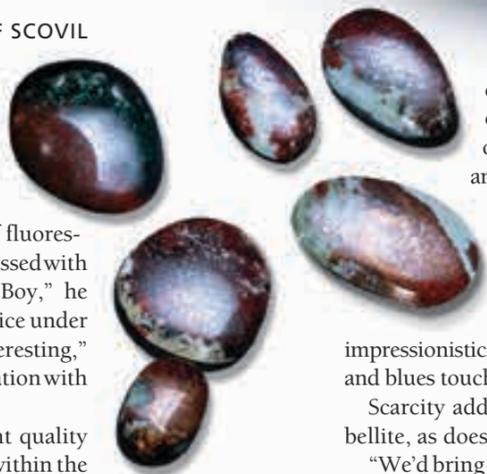
More than half a century later, Wright's daughter, Clara Finn, remembered a geologist's reaction to Wright's claim. "Uh-uh," he had said. "It seldom ever happens."

"I would have said the same thing," agreed Ken Phillips, chief engineer with Arizona's Department of Mines and Mineral

Resources. Fluorescent specimens aren't found in copper deposits, he explained. As it turned out, Bisbee would prove the notable exception.

Phillips, himself a collector of fluorescent minerals, seemed duly impressed with his first view of campbellite. "Boy," he exclaimed, as he examined the slice under a black light. "Exceptionally interesting," he commented on closer examination with an eyepiece.

He saw not only a fluorescent quality provided by the mineral calcite within the specimen but also a number of other minerals, including copper. Collectors claim as many as 16 minerals can be found in



campbellite, among them cuprite, chalcotrichite, limonite, manganese, turquoise and malachite—which means this rock gives up a surprise a slice. Polished, it can present a palette of the Christmas colors of greens and reds or an impressionistic tableau of white and yellows and blues touched with a coppery glint.

Scarcity adds to the intrigue of campbellite, as does the way it arrived.

"We'd bring it home in our lunch buckets," Mason Coggin explained in an interview prior to his death in November 2000. Coggin started work in the mines of Bisbee at the entry level of mucker and worked his way and education to become an engineer and a recognized expert of Arizona rocks and minerals.

Coggin knew Bisbee as a place where minerals ruled. "A miner could trade a haircut for rocks," he recalled, "automobile work for rocks."

And they could collect the rocks, filling boxes if not garages with their specimens from the earth they worked. "That's what happened to a bunch of it," agreed Verlyn Mason. The campbellite that didn't make it into those collections went the way of all things not considered paydirt. The gray flannel-looking rock with the fire hidden inside was pulverized for its copper.

The mines of Bisbee closed in 1975. The pumps that formerly had kept underground water from flooding the tunnels were turned off. The home of campbellite now sits submerged under hundreds of feet of water. Whatever glows down there is probably going to stay down there. And while you do occasionally hear talk of somebody having buried 55 gallon drums of the stuff, the only reliable source of

campbellite remains the old miners and their heirs.

"I usually buy what they have—everything," said Gloria Dahms of Gloria's Jewelry and Gemstones in Bisbee. Shopkeepers there get calls from around the world for campbellite. Buyers aren't only collecting the stone, they are wearing it. Campbellite jewelry can run from \$75 for a silver-set pendant to thousands for a brilliant red slab in a bola tie. This rock has certainly come a long way from riding around amid the banana peels and empty thermoses of Bisbee's working men. But, is it really unique?

According to Ken Phillips, other similar specimens of this type of mineral grouping may be found in other places. Mason Coggin jumped at such claims. "I'd like to see it," he challenged. But Phillips pointed out a supporting factor for campbellite—one that matters in a collector's world. "The mine or the location means as much as the specimen that fluoresces," he said. And this one was born in the world-renowned mining center of Bisbee, in the deepest and richest shaft of them all.

Of course, one cannot ignore the element of larceny in the story of the rock that should not be. The miners may call the lunch bucket activity "high-grading," but both they and the company, Phelps Dodge, knew the real word for it.

A miner could get fired. On-the-job rock-hunting meant a loss of a miner's time, a loss of profit. But conversations in Bisbee's stores and coffee shops also make it clear that supervisors could turn a blind eye, unless the miners' safety was being compromised.

A tour into the Copper Queen Mine will give you a taste of life in the mines. Of course, the experience has been toned down. You ride a kind of tram into the mountain, rather than descending 2,000 or 3,000 feet

straight down in a cage. You don't have water up to your ankles, thousands of feet of rock over your head, temperatures higher than 100 degrees.

In the early days, miners handled dynamite while using a candle for light. They could only be as good, one has to imagine, and as safe, as the guy working next to them. A miner's lot has always been hard work down to the bone.

"That's what it was," said Juan Palomino, who leads tours of the Copper Queen. He mined 30 years in Bisbee, worked in the Campbell—"to the bottom," he said. He and his fellow miners spent their lives bringing out the copper that made the wires of the world sing. Of those little lunch bucket rocks that also made it out, he mused, "We'd take a few pieces home and that's all."

Then the mines closed and somebody decided those little hunks are the real rocks to be valued, collected. Strange world, isn't it, Juan, both down below, where rocks can burn brighter than the hottest coals, and up on top, where collectors' eyes can out-shine the sun? **AH**

AUTHOR'S NOTE: The Bisbee Mining and Historical Museum contains photographs, displays and mineral collections, (520) 432-7071. Queen Mine Tours require reservations, (520) 432-2071. For information on the Bisbee Gem and Mineral Show and for general area information, call the Bisbee Chamber of Commerce, (520) 432-5421.

Kathleen Walker's family tree includes men who did their hard work in the coal mines of eastern Pennsylvania. She lives in Tucson.

Phoenix-based Jeff Scovil specializes in gem and mineral photography. His images have appeared in numerous books on geology and mineralogy, but he had never heard of campbellite before working on this story.



Campbellite, a colorful composite of a variety of minerals, originated deep underground in the now-flooded shafts of Bisbee's Campbell Mine.

LES PRESNYK AND EVAN JONES COLLECTIONS



Miners protected their heads from bumps and falling rocks with hardhats sporting carbide lamps to light their way.



PRACTITIONERS
OF THE JAPANESE
HIKING TRADITION
SAWANOBORI
MUST GO TO THE
STREAM'S SOURCE

Text by DOUGLAS KREUTZ
Photographs by JACK DYKINGA

SEEKING THE HEADWATERS

We started *sawanobori* with a three-word mantra buzzing in our heads. **Find the source. Find the source. Find the source.**

If you're not familiar with *sawanobori*, you might think that photographer Jack Dykinga and I were a couple of head-shaved, wild-eyed mystics beginning some kind of metaphysical quest for the Godhead.

Hardly. *Sawanobori*—even though it might sound like a meditative spiritual practice—is actually the vigorously physical sport of following streams to their point of origin, or source. Long popular in Japan but little known in this country, *sawanobori*, which translates roughly as “stream climbing,” is a unique way to explore wild country. No trail needed. No map necessary. Just follow the water.

Jack and I had chosen the upper reaches of the East Verde River near Payson for our first taste of *sawanobori* adventure. After a vehicle-supported reconnaissance of lower stretches of the river, we pitched a base camp in the Tonto National Forest and set out on foot to scout the route for a backpacking foray the next day.

“Lead on, *Sawanabwana*,” Jack barked at my back as we worked our way up a meandering watercourse flanked by firs and trimmed with clumps of vibrant-yellow monkey-flowers.

Snared by the scenery, Jack stopped to photograph East Verde water tumbling down a narrow, rocky gorge shaded by bigtooth maple trees. I pressed on upstream, inching along a slippery slope above the flow and clambering over tangles of deadfall timber.

I'd first heard of *sawanobori* in a book called *The Hidden West* by Rob Schultheis. In later research, I learned that the sport, as practiced in Japan, often involves ascending extremely steep, turbulent streams or even frozen watercourses. But, as Schultheis and others have noted, *sawanobori* can be adapted to any stream—and it's an excellent entree into the deep heart of canyons and mountain ranges of the Southwest.

Most of us, who have limited time and energy at our disposal, will begin a *sawanobori* trek a few miles to a dozen miles or so below the stream's source. Others might try a more ambitious version—such as a multiweek backpacking journey along the Gila River in Arizona and New Mexico. An ultimate Southwestern expression of the sport might be to follow the Colorado River from its mouth in the Sea of Cortes

***Sawanobori*, the sport of following streams to their origins, can be practiced wherever flowing water has carved a course. Even a dry desert wash meandering out of a minor mountain range can serve as a *sawanobori* venue. A vibrant, flowing creek in cool, forested high country offers the added benefits of abundant streamside vegetation and wildlife.**

to its source high in the Rocky Mountains of Colorado.

The East Verde, a tributary of the larger Verde River that slices down the center of the state north of Phoenix, struck us as splendid *sawanobori* material. Maps show it plunging off the 7,500-foot Mogollon Rim and carving a course through forests flanked by rugged canyon walls before slipping under State Route 87 and snaking west toward its confluence with the main Verde.

Like many Arizona “rivers,” the East Verde, especially in the upper reaches we were exploring, is clearly a creek in everything but name. In many places, Jack and I were able to cross this alleged river with the help of only two or three stepping-stones.

It was by misjudging one of those stones that I took my first *sawanobori* spill and splash on my way back toward camp from the scouting mission. Nothing hurt. Just a little wet. And, happily, Jack was somewhere downstream and unavailable to question the agility of the expedition's *sawanabwana*.

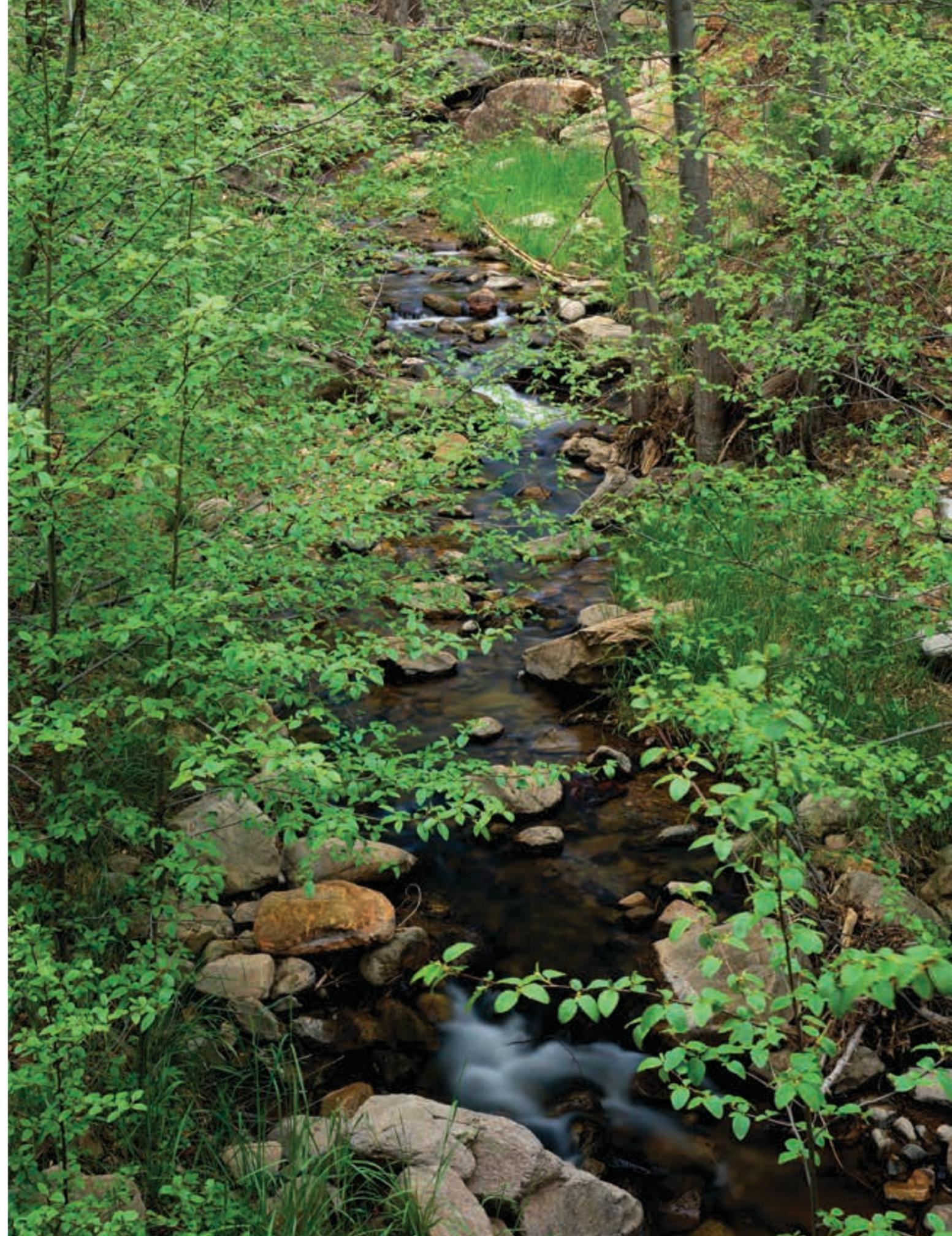
Back in base camp, Jack and I loaded our backpacks with a minimal amount of gear for an overnight outing over the next couple of days. We sought to travel as lightly as possible because our scouting hike had revealed a fundamental *sawanobori* truth: Trekking along a watercourse, at least in a rugged Southwestern canyon, is rougher and slower-going than hiking along a maintained streamside trail. You're scrambling over slippery rocks, creeping along little ledges above the water and high-stepping over fallen tree trunks—all the while taking care to avoid trampling vegetation or contributing to erosion.

Adding to the need for lightweight gear was the fact that Jack was automatically laden with his large, weighty 4x5 camera gear and even heavier supplies of film. And let's not forget my 3-by-5-inch notebook and two pens, I reminded Jack as I waved my writer's burden at him. “These babies aren't exactly light, you know,” I said, eliciting some words Jack clearly didn't learn from his mother.

Our pared-down equipment consisted of featherweight sleeping bags and ground pads, a light tarp doubling as ground cloth and emergency shelter, a pump-style water filter to purify East Verde water, a tiny stove, a teapot and modest food rations.

At dusk, a light rain settled the dust and contributed, however modestly, to the East Verde flow. Jack planned to turn in early, but I wanted to read for a while with water music in the background. So I walked the short distance from our campsite to the river, found a splendid (Text continued on page 27)

[PRECEDING PANEL, PAGES 20 AND 21] Near the Mogollon Rim origin of the East Verde River, a bigtooth maple frames the narrowing stream of water. [RIGHT] More like a rivulet than a river, the East Verde glides over rocks between banks lined with Arizona alder trees, which enrich the soil with nitrogen.





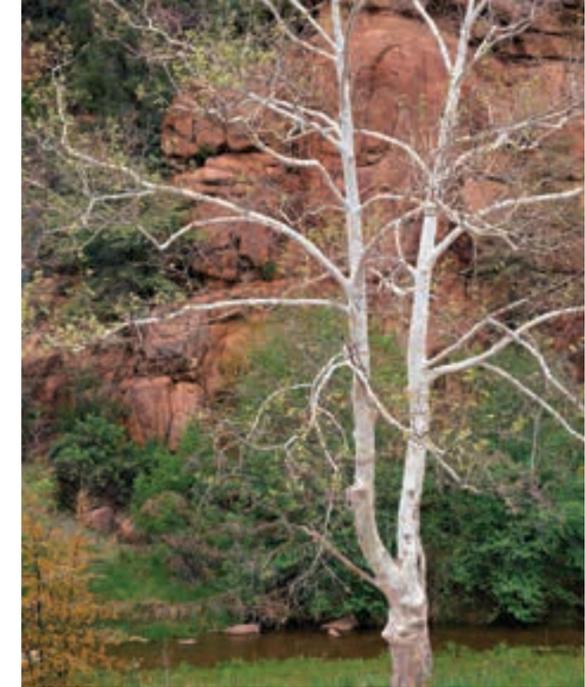


(Continued from page 22) rock seat under a sheltering overhang just above the stream, and knocked off a couple of chapters by the light of my climber's headlamp before retiring.

Stretched out in my sleeping bag, with only the perfume of dampened pine needles to remind me of the brief shower, I had the marvelous sawanobori pleasure of drifting off to sleep to the distant melody of tumbling mountain water in search of the sea.

The next day, burdened with the backpacks but aided by lightweight trekking poles for balance, we made steady progress up the watercourse. Late-winter snows along the Mogollon Rim had provided just the right moisture matrix at our 6,000-foot elevation to bring about a late spring and summer explosion of green.

We poled past dense gardens of shapely bracken ferns prospering in the shade of ponderosa pines, occasional Douglas firs and bigtooth maples. Mountain and streamside shrubs grew in such thick clumps along some stretches of the river as to create a slight sense of jungle. Elsewhere, early season



I hauled myself up increasingly steep slopes alongside the rocky, bone-dry ravine that would gush to life as the very upper stretch of the river after periods of heavy rain or snow.

wildflowers splashed the banks with color. Abundant yellow monkeyflowers were the stars, accompanied by assorted daisy species, paintbrushes and penstemons. Flourishing but not-yet-blooming columbine plants promised more brilliant yellow blooms to come over the course of the summer.

Jack and I took our time, walked in beauty and soaked up the scenery with wide eyes and big lenses. We had chosen a relatively short sawanobori route precisely so we'd have time to stop and smell the monkeyflowers, as well as get some exercise. Our one-way trekking mileage up the river might have been only 3 or 4 miles. There's no accurate way to gauge the distance because the stream takes so many twists and turns — and because we took numerous side jaunts to explore small tributary streams and springs.

But covering some set distance wasn't the goal. Finding the source, the beginning, of the East Verde River was our mission. And we were all over it by midafternoon.

As we followed the watercourse into an ever-narrowing canyon near the foot of the Mogollon Rim, we noticed that the flow decreased steadily until we finally reached a point where the main streambed was all but dry.

Ah, but just as we were concluding that the river must be devoid of water — or perhaps hiding underground — from there on up to the Rim, we noticed a faint flow, little more than a trickle, feeding in from the northwest. We followed this wet clue up steep slopes and were surprised to encounter

what turned out to be a power-line maintenance road with water seeping across it.

"Look how green it is up there," I said to Jack, pointing beyond the road toward a verdant shoulder of land at the foot of a boulder-strewn slope.

We had just discovered the source — or, more accurately, one of the sources — of the East Verde River.

Spring water gurgled from the earth into a kitchen sink-sized pool between a pair of gray-pink boulders spotted with patches of blue-green lichen. Watercress, bits of moss and blades of emerald-green grass trimmed the spring, which gave rise to a rivulet no larger than a man's index finger. This utterly minimalist tributary trickled downhill toward the main watercourse.

Okay, we were not exactly Lewis and Clark, but still, it appeared we had accomplished our modest mission of finding the highest source of water spawning the East Verde River.

As always in great sagas of exploration, there were some qualifications. Nature is rarely neat and tidy and predictable in her ways and means. Rather than issuing from a single source, the East Verde actually comes to life from several seeps and high springs like the one we'd found, an official of the Tonto National Forest told me in a conversation after our sawanobori journey.

And there was another consideration. Even as Jack set to work making photographs of ferns and boulders near the spring site, I found myself glancing again and again toward the lip of the Mogollon Rim at the head of our canyon. I've lived most of my life in the American West, and I've got this "water-runs-downhill" concept down to a science. It was perfectly clear to me that — while this spring might be the current high point and source of the river's flow — the ultimate source after rainstorms or during periods of snow runoff would be right there on the Rim itself.

Unfortunately for my somewhat tired legs, this realization carried with it a responsibility. It was my job, as an

[PRECEDING PANEL, PAGES 24 AND 25] A non-native plant introduced by homesteaders to the Verde Valley, purple-flowered periwinkles spill down the sun-dappled expanse of a mountain meadow.

[LEFT] The leafy spray of a box elder branch arches over the cascading river in a Japanese-style tableau of streamside serenity.

[ABOVE] The white bark of an Arizona sycamore provides a visual counterpoint to the ruddy-hued canyon walls framing the river.

[RIGHT] Near the source of the East Verde River at the foot of the towering Mogollon Rim, fallen trees and a profusion of seep-spring monkeyflowers create a thicket of sawanobori challenges.

investigative sawanobori reporter, to make my way to the once-and-for-all-seasons, indisputable source of the East Verde River. So while Jack worked on more photos—and, I might add, took a long snooze in ponderosa pine shade—I hauled myself up increasingly steep slopes alongside the rocky, bone-dry ravine that would gush to life as the very upper stretch of the river after periods of heavy rain or snow.

After perhaps an hour of uphill trudging, I topped out of the canyon and stepped onto the Rim Road (Forest Service Road 300). Not a drop of water in sight—but it apparently was the highest source of East Verde water in wet seasons.

“Sawanobori accomplished,” I congratulated myself before heading downhill.

That night, lower in the canyon, at a campsite near a well-flowered, gurgling stretch of the river, Jack and I chowed down on freeze-dried rations brought to life with boiled East Verde water.

Now that we’d had a taste of sawanobori, we started talking tough. Heck, we thought, someday we might want to follow, say, the Little Colorado all the way from its mouth in the Grand Canyon to its source high in the White Mountains. Even that would be a piece of cake compared to a sort of ultra-sawanobori adventure chronicled in a movie Jack described called *Mountains of the Moon*. The 1989 film is the gripping story of English explorers searching for the source of the Nile River in Africa.

But that night, nestled in a wooded Arizona canyon under a canopy of glowing stars, we didn’t need the Little Colorado, the big Colorado, the Nile or the Amazon. It was enough to fall asleep to the melody, the lullaby, of the East Verde River—and to know precisely from whence it came. ■■

Douglas Kreutz of Tucson wants freeze-dried Japanese cuisine for his next sawanobori adventure.

For Tucsonan Jack Dykinga, backpacking over broken terrain in search of the stream’s headwaters with his old climbing buddy made for a contemplative hike. Going slowly afforded a lot of time to talk, whereas climbing mountains often left them breathless and unable to speak.



LOCATION: The East Verde River flows from the Mogollon Rim about 20 miles north of Payson and meets the Verde River about 40 miles west of Payson.

GETTING THERE: To reach a good starting point on the East Verde from Payson, follow State Route 87 north about 4 miles to Forest Service Road 199. Turn east onto FR 199 and follow it 10.3 miles to Forest Service Road 64. Turn west onto FR 64 and drive 0.7 of a mile to Forest Service Road 32. Proceed 3 miles north on FR 32 to the Washington Park Trailhead. Park in the trailhead lot, which is just west of the river. It’s possible to start a sawanobori trip there, or farther downstream if you want a longer trek. Upper reaches of the East Verde and many other Arizona watercourses have the advantage of easy access by road and nearby trails. Sawanoborists on the East Verde can leave the stream course at various spots along the way and return to the starting point via the Colonel Devin Trail or a nearby power-line road.

TRAVEL ADVISORY: Spring, summer and early autumn are good seasons for a sawanobori trip. Always purify water from the river if you plan to drink it. Take meticulous care to avoid damaging streamside vegetation, and practice low-impact camping.

ADDITIONAL INFORMATION: Tonto National Forest, Payson Ranger District, (928) 474-7900.



Birding in Truxton Canyon

Permanent water
ensures a robust habitat
for many species

BY SAM NEGRI



[RIGHT] Watered year-round by White Rock spring, Truxton Canyon in northwestern Arizona attracts a wide variety of birds, including the yellow warbler, a small neotropical migrant that feeds mainly on insects. TOM VEZO



THE SUN CREPT BARELY over the horizon, and the sky was still deciding whether to remain milky or burn into the silky blue that is typical above the Arizona desert. Sitting in my truck on a quiet side street in Kingman, I watched the beam of my headlights fade in the brightening air and waited for Russ Balda to emerge. Balda, then an ornithologist at Northern Arizona University in Flagstaff who had spent the night in Kingman, would join me on an excursion to Truxton Canyon, a fertile but largely unknown birding spot.

I'd had my first encounter with this narrow canyon, some 40 miles east of Kingman, several years earlier while researching the history of the sprawling Crozier Ranch. Truxton Canyon runs east and west, directly south of the Crozier Ranch.

Long before highways were built across northern Arizona, Truxton Canyon was a popular route for Indians, explorers and railroad survey crews because it contains a permanent water supply. Today the only

non-natural feature of Truxton Canyon is the train track owned by the Burlington Northern Railroad.

The railroad line is on a terrace high above Truxton Wash, which contains permanent water from White Rock spring. The birds that fill the willow and cottonwood trees have adjusted nicely to the steel snake that roars through their homes several times a day.

By the time Balda and I traveled east on Old U.S. Route 66 and turned south toward the mouth of Truxton Canyon, it was 6 A.M. The canyon sits at an altitude of 4,200 feet, and the air was still cool, even though the sun was up. As I was about to cross the creek, headed for the rail bed where we were going to start our hike, I caught a flash of yellow out of the corner of my eye.

"Some kind of yellow bird stopped in that willow, but it moved too quickly," I said, stopping the truck in front of the creek.

"Let's get out and look around," Balda suggested,

[OPPOSITE PAGE, TOP] The brilliant scarlet plumage of the male summer tanager contrasts sharply with the female's subdued orange-yellow and olive coloring (above). [OPPOSITE PAGE, BELOW, LEFT TO RIGHT] Lucy's warbler, yellow-breasted chat. ALL BY TOM VEZO



and within no more than 30 seconds, the sparrow-sized bird appeared in a willow thicket nearby.

"Yellow warbler," Balda declared. "Isn't he a beauty?"

Balda, who looks like a shorter version of Burl Ives, dropped his binoculars on his chest and sang, "*Sweeta sweeta I'm so sweeta.*"

"Hear his song?" he asked. "*Sweeta sweeta I'm soooo sweeta.*"

Balda got a very big kick out of this little concert, but I heard so many birds at once that I couldn't tell one from the other.

"Yes, I hear it clearly," I said.

Later I did hear it clearly, so that turned out to be, in retrospect, just a small, bird-sized lie.

AT THAT POINT we should have headed back to the truck and gone into the main part of the canyon, but Balda had wandered farther up the wash and was now transfixed in front of an enormous cottonwood tree.

As I approached, jumping over puddles and scattering the killdeer trying to get me away from the shallow nests they'd scraped in the dirt, Balda launched into a staccato monologue.

"You've got to see this! A yellow-breasted chat. Look

at that. I can't believe we're getting such a view. They're not necessarily rare, but they're usually hard to see because they stay in the thickest vegetation, and they don't come out. I was just standing here looking at a Lucy's warbler [which is named for the niece of John J. Audubon, the famed observer and painter of birds] and suddenly that chat darted out from the cottonwood as if to say, 'How come you're not looking at me?'"

We stood in front of that cottonwood at least a half-hour and were treated to clear views of some of the canyon country's most beautiful birds—the bright red summer tanager, hooded orioles, black phoebes, goldfinches, not to mention numerous unspectacular examples of what birders call "LGBs"—little gray birds, such as Bell's vireos.

Balda would have remained at that cottonwood the rest of the morning if I hadn't reminded him that we wanted to see the main part of Truxton Canyon. We returned to my truck and climbed in, and then heard the dreaded sound:

Click clickclickclick.

"Do you have a dead battery?" asked Balda.

I glanced down at my headlight switch.

"Hmmm, it appears I left the headlights on while we were out looking at birds. Well, at least I have jumper cables."

Truxton Canyon is not an ideal place to kill your battery, but it could have been worse. Old U.S. 66 was less than a mile away, and I figured I could always find us a jump start later in the day.

"Maybe we should just leave the truck here and hike the rest of the way to the canyon, look for birds, and when we get back, I'll see what I can do about getting us a jump," I said.

"I think that would be best," Balda agreed. "Otherwise, these birds will disappear as it gets later in the day."

We set off across the creek and followed a dirt road up the hill toward the tracks. Before we reached the tracks, about a mile away, we came upon two huge ponds—stock tanks, actually—that had expanded greatly during the wet winter.

The day was perfect for birding: cool air, no wind and plenty of water. A couple of unmistakable violet-green swallows plunged off a nearby cliff and darted above the pond.

"What an incredible place," said Balda, pointing toward two large, long-legged birds against a far

bank. "There's a great heron and an American heron. It's spectacular to see those birds against the desert backdrop."

I knew what he meant. Shore birds occasionally wander east and west of the Colorado River, which is at least 70 miles west of Truxton Canyon, and while these visitors are not necessarily unusual, they are startling to see.

The day before my visit with Balda, I had walked into this canyon with now-deceased Sam Robinson, whose family owned Crozier Ranch at the time. As we watched for snakes and meandered through the tall grass in the canyon's bottom, something white flashed against the adobe-colored canyon walls above us and appeared to light near the creek behind some dense willows. We both were startled.

"What was that, Sam?" I asked.

"I don't know, Sam," he answered, with the hint of a smile.

Robinson was pretty good at guessing the weight of cows, and I'm pretty good at identifying a bad spark-plug wire, but swiftly moving birds that show themselves for only three or four seconds were a real challenge to us both.

"I'd say a snowy egret or a heron," I declared with authority.

Robinson shrugged. "It'll be back, I'll bet."

Evidently it did return the next morning when I walked the area with Balda, and he identified it as one of two herons.

Balda and I left the cattle ponds and climbed to the railroad bed, where we were nearly level with the tops of cottonwood trees that had their roots below us in the canyon proper. For about a quarter-mile, we followed the rail bed until we found an easy route into the shade along the creek that wanders through Truxton Canyon.

At the bottom, we discovered refreshing clumps of watercress growing wild along the creek. Balda cocked his head and stood stock-still.

"Hear it? *Cheetle cheetle chee! Cheetle cheetle chee.* There he is. It's that LGB—Bell's vireo. Such a nice little song."

Suddenly the professor in Balda remembered his students back at NAU. "You know," he said, "if I were going to teach songs, this is where I'd come. This place is just incredible habitat. It has everything.

"There's no doubt this is yellow warbler heaven. But—hey, look at that—there's a cottonwood branch

pointing toward that dead mesquite near the creek, and there are two black phoebes and a phainopepla and they're flycatching together.

"But see, that's what I mean," Balda said. "You have so much here because the habitat is marvelous. The birds will feed on insects and, later in the year, on seeds, and the insects thrive on standing or running water, so here you see these beautiful birds, the vermilion flycatchers, sallying forth and catching insects in flight, and at the same time you have gleaners like the yellow warblers and Lucy's warblers picking insects off the leaves."

As I listened to Balda's enthusiastic reaction to this rich canyon, I thought of another time and place. I was at the border between Mexico and Guatemala, watching the cloud-filled forest for a glimpse of the resplendent quetzal. My companions had traveled a great distance to record a sighting of this bird, and later that day I cautiously brought up this seemingly hollow fascination with bird lists.

"It's not so much the list," my friend Rick Taylor of Tucson declared. "Don't you see? Birds are very good at taking the initial collecting instinct in someone and elevating it above that. Birds are symbols of where you've been and what you've done in your life and your connection to the real world of nature, and so if you say you've seen a resplendent quetzal, it means you've visited a remote tropical place, that you've seen tremendous tropical oaks encrusted with . . ."

When I returned from Truxton Canyon, I called Taylor and reminded him of the statement he had made 10 years earlier, and then I said, "So, let's play a little game. I'll rattle off a list of birds I saw last week, and you tell me where in the natural world I was."

"Okay," he said.

"Bell's vireo, Lucy's warbler . . ."

"Stop!" he shouted.

"Hey, I'm not done. I've got about another 20 birds."

"It doesn't matter," he said. "Wherever you were was lower than 4,500 feet in altitude, you were near a desert stream or wash and there were thickets of mesquite nearby. Could have been hackberry, but probably mesquites."

"You're right on the money," I said.

"It goes without saying," he said, humbly. **AH**

Sam Negri of Tucson has pursued birds in canyons throughout Arizona and is always equipped with binoculars, a full set of tools and jumper cables. He claims the dead battery only delayed his exit from Truxton Canyon by 45 minutes.

[OPPOSITE PAGE, FAR LEFT] Providing habitat for many bird species, cottonwood trees such as these in Truxton Canyon grow along Arizona's rivers and streams. DAVID H. SMITH [OPPOSITE PAGE AND THIS PAGE, ABOVE, LEFT TO RIGHT] Vermilion flycatcher, Bell's vireo, northern cardinal, hooded oriole. ALL BY TOM VEZO

Lonely Land of Mountain Lions

Secluded Santa Teresa Mountains
sheltered outlaws on the run

Text by CHRISTINE MAXA Photographs by MARTY CORDANO

“LOOK AT THAT,” said Newell Dryden as he pointed to a faint, but large, black bear track on the Gardner Canyon Trail in the Santa Teresa Mountains. “No telling what we’ll see today.”

No telling. Each time I explore this lonely sky island range in southeastern Arizona, it surprises me. Its demeanor lags decades behind the 21st century, as if the mountains reside in a time warp where nature still rules and the men that frequent its slopes often look the same as the cowboys who tried to tame it.

Photographer Marty Cordano and I joined Newell and his wife, Bunny, on a 14-mile horseback ride into the center of the L-shaped Santa Teresa Wilderness at the southern end of the range. The Drydens run the Black Rock Ranch Wilderness Retreat from their family’s 110-year-old ranch situated in the folds of the mountains near landmark Black Rock. The Drydens know the area intimately, and the day-long ride turned several pages of history of a range that many people don’t know exists.

My introduction to the untamed nature of the Santa Teresas came a year earlier while hiking the nearby Cottonwood Mountain Trail. Unsigned, secluded and many miles and hours from help—like most of the mountains’ routes—the trail made me feel like a tenuous guest in a wilderness with a spirit much bigger than mine. Its unkempt geology showed a hodgepodge of spired ridgelines, precipitously gouged canyons and slabs of rock slanting down slopes.

I didn’t know it at the time, but the mountains got a surreptitious hold on me, like the spark of chemistry that makes someone linger on the mind.

“They do that,” said Chuck Duncan, trail manager with the Coronado National Forest. “It’s a different type of country back there. It’s very remote and not for everyone. There’s a feeling that gets a hold on you. A seclusion that you just can’t quite explain. You don’t really know what you have until you experience it.”

The next time I explored the wilderness on the Reef Basin and Holdout Canyon trails

six months later, I looked forward to the feeling Duncan described. I planned to hike to an area located deep in the mountains’ belly where scofflaws skulked among a labyrinth of weirdly eroded granite formations. But before I even got a chance to set foot on the trail, a gregarious pack of hounds surrounded me as I sat in the front seat of my truck changing my shoes. One of the dogs jumped unabashedly into my truck as if the open door had invited it in. Their owner soon appeared on horseback.

“Howdy, ma’am,” the man touched his hat as he nodded his head. “Some pretty rugged country in there.”

Cowboy from the top of his hat to the point of his boots, with chaps and a rifle in between, the man, who introduced himself as Larry, leaned forward with one hand on the horn of his saddle and the other crossed over it as he talked with me. After I told him of my intended route, he told me he was tracking mountain lions.

Elusive as the cats they hunt, trackers normally shy away from any attention. Larry talked briefly about the cats in the Santa Teresas.

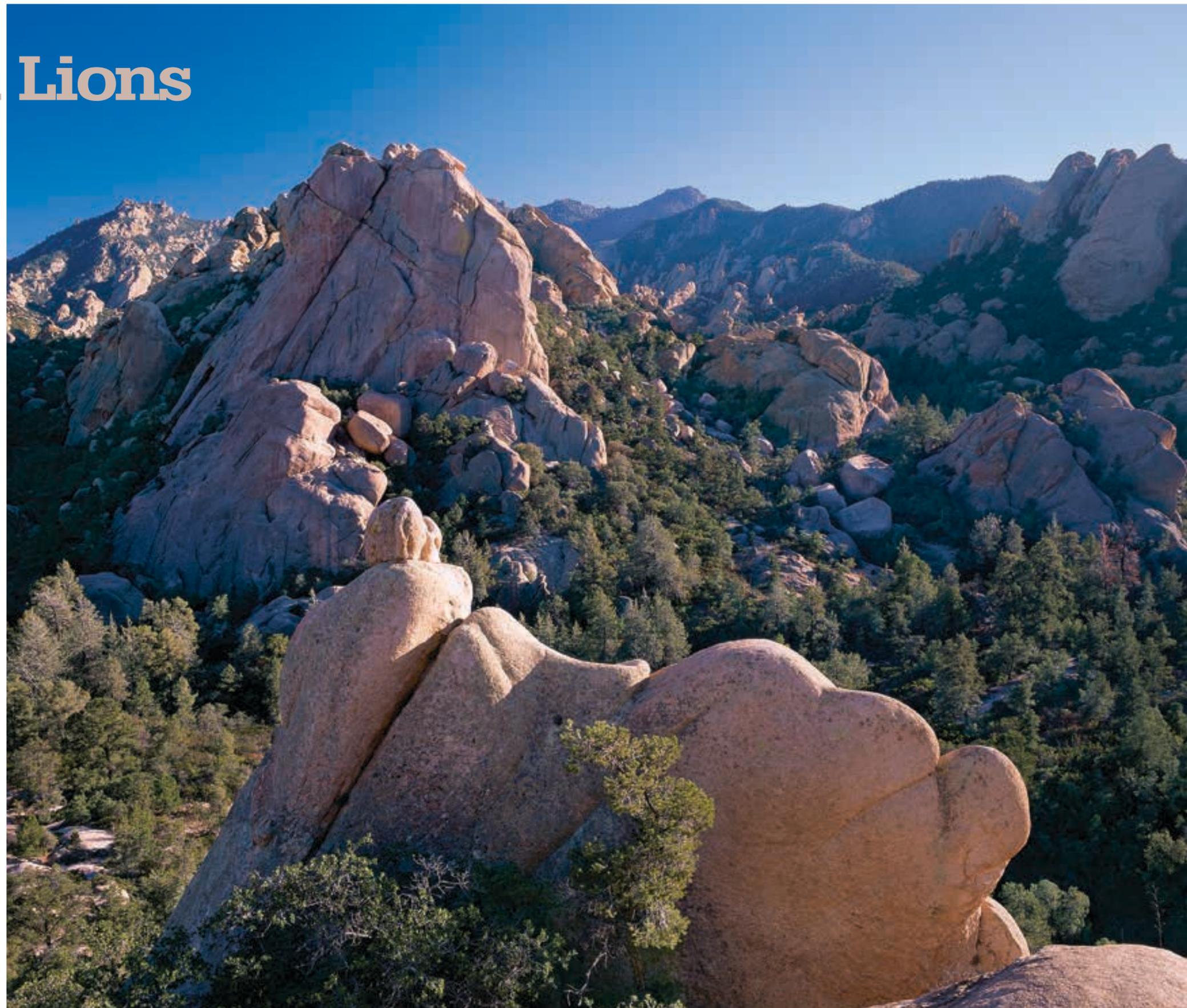
“It’s a pretty electric moment when you corner a cat,” he offered. “They spit and snarl like crazy.”

The Santa Teresas have the highest concentration of mountain lions in the state. Duncan said he often finds lion tracks covering his when he tours the wilderness. Once, he said, he watched a mountain lion for more than 45 minutes.

When I reached the Holdout Trail, I found cat tracks almost as big as my hand where the trail entered a pine-oak forest. Though I was hiking solo, I knew I was not alone.

The tinge of fear that toyed with my comfort level during my first hike in the

[RIGHT] The untamed and inhospitable terrain of Holdout Canyon in the Santa Teresa Mountains sheltered outlaws and others on the run from the 1800s until modern times. Hard to reach and difficult to negotiate, its landscape also offers sanctuary for some of the state’s largest animal predators.



wilderness tried to resurface. Instead, a peaceful feeling prevailed. The mood I felt that day returned when Bunny stopped to point at a ridge of purple bluffs that made an ill fit with the rest of the mountains' granite landscape.

"This is where our son, Vernon, got chased by a mountain lion," Bunny said as our group passed the ridge. "He was out working his lion dogs and cornered the cat. The lion started chasing him and got so close it would swipe at him, and Vernon would run, and the dogs would bark. That's what saved Vernon. The dogs agitated the lion so much it started chasing them."

Heading up a steep ridge, we paused for

a moment to let our mounts rest. While the horses and mules munched grasses and caught their breath—mine acting like he'd never seen a blade of grass before—we perused the panorama of the Santa Teresas' wild geology. Serrated Black Rock vaulted skyward to the east, the purple cliffs lined the south view and pinprick pinnacles called the Needles pointed to the western sky. We pushed up the trail, but when we reached a grassy stretch near Mud Springs, my mule, Jess, figured he'd hit pay dirt and became more interested in nutrition than transportation. Determination, in the form of a couple of well-directed kicks, overcame Jess' stubbornness, and he grudgingly followed

the rest of the pack toward Gardner Canyon.

"Look here," Newell pointed to two ruts in the soft earth. "This is where a bear stations himself and scratches against this pine here. Probably a dominant male marking his territory. This is a bear trail. Bunny and I see them here all the time."

Our mounts clattered across slabs of slickrock and then down a dicey mountain slope toward the Crows Nest. Ornerly Jess, who should've been concentrating on the rocky route, couldn't bear to let tasty morsels of mesquite go unchomped. Jess proved his sure-footed value, however, as he nonchalantly navigated the tricky route with a mesquite branch dangling from his mouth.

Quiet. Remote. Wild. Secret. Holdout Canyon had beauty that touched as deep as a heartbeat.



"There's Fisher Canyon," Newell said as he stopped and looked to the north. "Fisher had a small mine in there and a couple head of cattle. He even carried in an old Model T engine slung between a couple of burros."

John Fisher lived in seclusion in the Santa Teresas in the 1920s after he shot a man in Texas. He claimed self-defense, but the law had called it murder. Fearing the Texas Rangers every time someone would try to enter the canyon, Fisher would start shooting with no questions asked. But Newell's mom and aunt occasionally took fresh biscuits and jam to Fisher.

"They'd tie a hankie onto a stick," Newell explained, "and yell, 'Yoo-hoo' to him and he'd know it was them. He'd eat the biscuits and jam, then play the fiddle for them."

"Fisher loved to play the fiddle," Bunny added. "There's a rock in the cave where Fisher lived that he wore down from his heel rubbing against it when he rocked back and forth while he played."

The secluded outback of the Santa Teresas presented a natural haven for people who wanted to disappear, such as outlaws and draft dodgers. Holdout Canyon was the area of choice for men on the lam.

"There's Holdout Canyon," Newell said, pointing to a conglomeration of rocks too distant to discern. "We'll head toward the Holdout, then to Black Rock Canyon, then head back to the ranch."

With the landscape hinting of the granite

[LEFT] Run by Newell and Bunny Dryden, the historic Black Rock Ranch Wilderness Retreat, a working cattle ranch, lies nestled in a remote valley in the Santa Teresa Mountains.

formations of Holdout Canyon, my mind wandered back to my hike a few months earlier on the Holdout Trail. Following the cat tracks through the forest of twisted oaks, gnarly manzanita bushes and piñon trees produced an enchanting feeling. But when the trail crested a ridge top overlooking Holdout Canyon, the landscape transformed into a granite wonderland where giant boulders lolled around and columns of rock teetered precariously upon on another. I had stopped and just stared for several minutes.

Quiet. Remote. Wild. Secret. Holdout Canyon had beauty that touched as deep as a heartbeat. If the trail stood at the door of enchantment back in the pine-oak forest,



to see the mountain lion. Instead, several coatimundis appeared and scampered around the rocks.

The trail continued toward a large cairn that signaled the route toward Holdout Creek. And then the trail disappeared.

"There are so many nooks and crannies in the Holdout country," Newell remarked about my experience, "I'm not surprised you lost the trail. I've been here 50 years, and I still don't know the Holdout completely."

At a pool of water in a shady crook of a crevice, Newell told us to tie the animals. Jess took to

munching loudly on the dainty grasses nourished by an adjoining stream. Cordano's horse headed directly to the pool with the look of wallowing in his eyes. Bunny warned Cordano of the horse's intent in time for him to dismount and let the horse water.

We followed Newell on foot through a prickly tangle of catclaw up a steep hill, into a narrow streambed stuffed with long grasses and boulders, then up a slope of slickrock.

"This is Holdout, right here," Newell informed us at last. "This is where the outlaws held out until things cooled down. I once found an old wood stove under a

[LEFT] On the trail to Holdout Canyon, author Christine Maxa and the Drydens examine the tracks of a passing black bear, a recent visitor to the area.

[ABOVE] Cottonwoods and the commanding facade of Black Rock mountain reflect in the still waters of a stock pond on the ranch.

big old boulder where outlaws hid out."

Newell's grandfather, Hollis Holladay, eastern Arizona Territory's first game warden, got a chance to meet many of these fugitives while he patrolled the mountains. Sometimes Holladay would get supplies for them, such as one draft dodger and his family, when they'd provide lists and money.

"The family was from Oklahoma," Bunny said. "They lived at what we call Tar Paper House along the Black Rock Canyon Trail. The home was made of tar paper, scrap lumber and anything else they could rig up. They raised sweet potatoes and corn in a clearing just down the trail and went back home when the coast was clear."

All that remained of the Tar Paper House, our last destination before heading back to Black Rock Ranch, was a stone chimney covered with vines. And an unusual coziness. The mountains dipped and ground all around us like a tumultuous sea, but here in Black Rock Canyon, I felt that strange warmth—almost as if the mountains wanted to wrap their arms around us.

"I know that the wild critters are here," said Bunny, "but I feel safe. The canyon feels like a cocoon that seems to wrap its arms around you."

The Santa Teresa Mountains do that. **AH**

Christine Maxa of Phoenix spent several years getting up the nerve to hike in the wild Santa Teresa Mountains, but it took no time at all to fall in love with them. She also wrote the Hike of the Month in this issue.

Marty Cordano of Bisbee says the rocky heart of the Santa Teresas is difficult to reach but worth the effort. "If I ever need to hide," he says, "that's where I'll be."



Holdout Canyon was where it entered.

When I had resumed my hike, the trail put my route-finding skills to the test as it descended into the canyon. The sketchy path, connected by cairns that blended into the rocky landscape, skidded down decomposed granite, squeezed between boulders and traipsed across slickrock.

Surrounded by a morass of granite in the bowels of the canyon, I had stopped again and just stared for several minutes, absorbing the beauty. Suddenly, my peripheral vision caught sight of an animal before it slipped into a crevice. Its long tail remained visible, twitching from the rocks. I had hoped



LOCATION: 190 miles northeast of Tucson and west of Safford.

GETTING THERE: From Tucson, drive west on Interstate 10 to Exit 352 past Willcox and travel north on U.S. Route 191 to Safford. At the intersection of U.S. 191 and U.S. Route 70, turn left and drive northwest. After about 13 miles, turn left onto the Aravaipa-Klondyke Road and drive 30 miles to the community of Klondyke. Continue about 2.5 miles to an unmarked dirt road and turn right, heading north. Drive about 3.1 miles on a four-wheel-drive track and park at the hilltop.

TRAVEL ADVISORY: All of the trails in the Santa Teresa Wilderness require expert route-finding and experienced hiking skills.

WARNING: Segments of this road cross private land, and permission to cross may change at owners' discretion; heed all "no-trespassing" signs.

INFORMATION: Coronado National Forest, Safford Ranger District, (928) 428-4150.

HOT SAUCE
We asked our readers for hot sauce jokes. Here's a sample of what we got:

Salsa is great for your health. It has healthy ingredients like chiles, tomatoes and onions, and if you eat a regular diet of the stuff, no germ-carrying human will come near you.

GUY BELLERANTI, Oro Valley

I took my visiting granddaughter on her first trip to see her Aunt Betty in Pinetop. Betty greeted her by saying, "I made you a fresh bowl of green chile sauce and chips."

After one big mouthful, my granddaughter started to fan her mouth and whispered to me, "I'm glad we didn't come up here in the winter, Grandma. If this is chilly, I can't imagine what cold would be like."

MRS. GARNETT CHARLES, Sun City West

You know your hot sauce is strong when it's used to start a campfire.

TOM PADOVANO, Jackson Heights, NY

What do you call yesterday's hot sauce?

Your old flame.
ELLEN SMITH, Aiken, SC

A minister who was very fond of hot sauce always kept a bottle of it on his dining room table. He

offered some to a guest, who took a big spoonful.

When the guest was finally able to speak, he gasped, "I've heard many ministers preach hellfire, but you are the first one I've met who passed out a sample of it."

ERIC QUIST, Fountain Hills

On a trip to Mexico, we went to an old-style restaurant where the hot sauce was so hot we had to drink the water.

HERM ALBRIGHT, Indianapolis, IN

{early day arizona}

Boy: "When the teacher heard me swear, she asked me where I learned it."

Father: "Oh, no. What did you tell her?"

Boy: "I didn't give you away. I blamed it on the parrot."

Jerome Mining News, OCTOBER 21, 1911

SPECIALTY OF THE HOUSE

At a Phoenix party, a woman was introduced to a doctor of medicine, and to make conversation she asked, "What is your specialty?"

The doctor replied, "I'm a dermatologist."

She thought a moment, and then queried, "What does that mean?"

He smiled and replied, "I'm the type of physician who asks you up to look at your itchings."

RUTH BURKE, San Simon

FAST FOOD

Several years ago when I was living in Phoenix, I stopped

UNUSUAL PERSPECTIVE
Turquoise is Arizona's official state gemstone and can be found throughout the state with especially large deposits in my mom's jewelry box. — Linda Perret

at a fruit stand that was advertising fresh strawberries. The saleswoman said they had sold out but her husband had gone to get some more. As I debated on whether to stay and wait for them, I asked her if they were fresh.

The woman gave me a dumbfounded look and then glanced over her shoulder at her husband just emerging from the strawberry patch.

"Well," she said blandly, "he's a-running ain't he?"

THOMAS LAMANCE, Prewitt, NM

ONE HOLDOUT

After arranging a banquet for our church choir, I held a meeting to inform them of the menu I had chosen: roast beef, mashed potatoes and gravy, the usual banquet food. Everyone agreed that would be fine, except Mrs. Green, who was sitting in the back row. She allowed as how she and her family didn't care for roast beef and would rather have Southern fried chicken.

I went to the phone and spent a half-hour explaining and

pleading with the manager and chef of the restaurant, who were already preparing for the meal. I returned to the meeting and informed the group that we were going to have roast beef and Southern fried chicken.

Feeling very elated, I asked that everyone who would attend to please hold up their hand. All of them did so, except Mrs. Green. When I asked why she didn't hold up her hand, she replied, "Oh, we can't go. We have to go to my cousin's birthday party."

ROY E. CLAUS, Sun Lakes

GOOD HUNTING

Three grizzled old-timers hit the woods on their annual hunting trip. One day one of the hunters came staggering back into camp toting a huge buck.

"Hey," said the man in camp, "that's quite a trophy, but where's Fred? Wasn't he with you?"

"Yeah," came the reply, "but right after we shot this deer, he collapsed with a heart attack."

"But why did you lug the deer back instead of Fred?"

"Well, you know, I was afraid to leave the buck because someone might steal it, but I knew nobody would steal Fred."

BEN NICKS, Shawnee, KS

{reader's corner}

A sunset signals the end of the day. It's Mother Nature's way of blowing the 5 o'clock whistle.

Send us your **sunset jokes**, and we'll pay \$50 for each one we use.

TO SUBMIT HUMOR: Send your jokes and humorous Arizona anecdotes to Humor, *Arizona Highways*, 2039 W. Lewis Ave., Phoenix, AZ 85009 or e-mail us at editor@arizonahighways.com. Please include your name, address and telephone number with each submission.

Knowledge From Mr. Cactus, Yes, and Perhaps From Grandpa, Too

REMEMBER THE LONG TREKS with my grandfather through the desert surrounding my neighborhood to visit the knower of all knowledge, the supreme being, Mr. Cactus.

Excitedly, I would pass his loyal subjects, the cholla, the prickly pear and the creosote bush, each waving spiny arms. But Mr. Cactus stood the tallest of all the saguaro cacti, with arms that scraped the sky, his thorns touched with gray like a seasoned ancient scholar, his eyes and mouth gaping holes dug by Gila woodpeckers long ago.

Looking up at the giant, I would mimic my grandfather and wave, as was custom, and then ask my pressing questions. "Why is the sky blue? Why don't we live forever? What are clouds made of?" Because I didn't know cactus-talk, my grandfather would translate, cupping his hand to his ear and modulating his voice to sound deeper.

For several years my grandfather and I regularly visited Mr. Cactus, solving the mysteries of life with each session. One day I noticed a change in the goliath. He was wearing a neon pink ribbon. "That's a medal of honor," my grandfather explained as I eyed the ribbon. I didn't think to ask how Mr.

Cactus had obtained such a high honor, but knowing the power of this extraordinary saguaro, I sensed it was for some awesome feat. I noticed other cacti had ribbons of the same color, and I marveled at how these loyal subjects must have earned them by following his example.

Suddenly, I spotted a ribbon caught in some sagebrush. I immediately picked it up, but hesitated to wear it. Was I worthy to wear such a badge? I asked my grandfather to question Mr. Cactus and was elated to learn that not only could I wear it, but that it was meant for me.

Our encounters went on regularly for a while after that day until my grandfather suggested we travel a different desert trail. He had learned that Mr. Cactus was on a well-deserved

vacation. We must have scoured the whole desert as the months went by, and I began to get worried about Mr. Cactus. The desert seemed to be shrinking, giving way to concrete and asphalt. I started to worry that a cactus should not be away on business for so long, especially with all the construction in his desert.

The next morning I grabbed a canteen and slipped out of the house. As I made my way across the familiar desert trail that led to Mr. Cactus, I noticed something odd now about his desert kingdom. Many of his once loyal subjects lay uprooted. Dust devils whipped through vast nothingness.

Running toward the mesquite clearing, I raced past a huge yellow Caterpillar tractor, then stopped dead in my tracks. Nothing could have prepared me for what I saw. Mr. Cactus, the mighty lord of the entire desert, was dead. This once proud giant was reduced to mincemeat, mutilated by a chain saw. As I shuffled forward, sticky cactus blood congealed on my sneakers, and the potent smell of decay hung heavy in the air.

I examined the remnants of his arms, imagining each thundering blow as he fought against invading armies of tractors, each of his loyal subjects rushing to his aid. But, inevitably they had won. The enemies had sliced him into horizontal cactus disks for easy disposal. I began to feel a tightness building in the back of my throat, for the world had lost an endless reservoir of knowledge. His kingdom was condemned by progress on the way to becoming a gated community.

"He was just a dumb cactus after all," I muttered aloud to myself. At that moment I was overcome with sadness. I didn't want to believe that Mr. Cactus, the mightiest of all saguaros, was a fraud. How could such a powerful entity be reduced to ruin? I morosely waved, as it was custom, and started my long journey back home, never looking back.

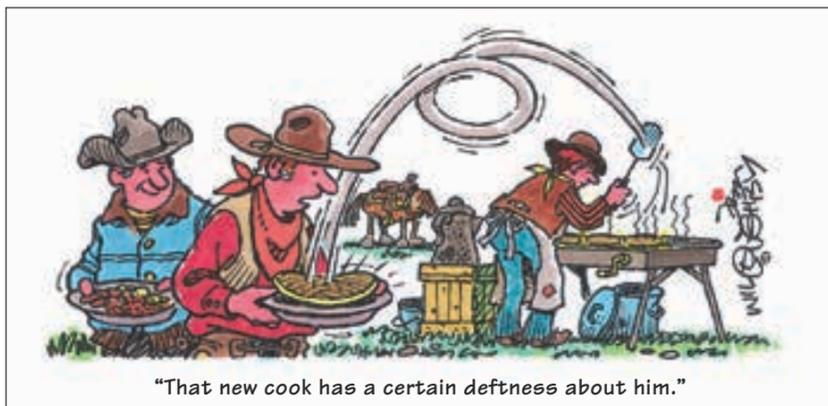
I know now that what was special about that desert was my grandfather. It took an extraordinary person to turn an ordinary cactus into a king, and a desert into a kingdom, unlocking the imagination of a child.

I still recall many of the lessons taught by the noble cactus. My grandfather seemed to know everything. No question was too big or small, no challenge too mighty for him to overcome. He was Mr. Cactus, a fountain of knowledge and resourcefulness, but most of all he was a friend who could be trusted. ■



WILLUGHBY WEST

by JIM WILLOUGHBY



"That new cook has a certain deftness about him."

Show Low to Taylor Drive Has Picturesque Streamside Attractions

SOMETIMES THE BACK way is the best way, especially when it reveals a chattering stream complete with plump Apache trout, a quaint schoolhouse and tidbits of history. Bourdon Ranch Road in Navajo County is just such a route. Here a hike, some

golf and a visit to a sleepy farm town highlight an easy afternoon drive.

Start this trip by turning north off U.S. Route 60 near Milepost 347, 5 miles east of Show Low, where a nondescript green sign identifies Bourdon Ranch Road, named for



William Bourdon. The road is marked Forest Service Road 918 on most maps.

In the mid-1900s, Bourdon's ranch stretched for more than 30 miles with headquarters near the head of Silver Creek, a beautiful perennial stream.

Piñon, juniper and scrub cedar trees provide shelter for elk, antelopes, deer, coyotes, bobcats and even an occasional wandering bear or mountain lion. Birds abound, including nesting eagles.

The rugged land is covered with malapai, the black basalt rock widely used for fences, buildings and fireplaces. A cinder cone stands sentinel on the northern edge of the White Mountain Volcanic Field, its cinders mined for use on highways, railways and in building material.

Turn right (east) onto Hatchery Way about 5 miles north of U.S. 60. A short drive on the dirt road leads to an interpretive sign and a trailhead. The original Bourdon house stands on the left, made from those plentiful black malapais. Today, the Arizona Game and Fish Department owns the home.

A 4-mile round-trip hike leads to the spring that forms Silver Creek and the Silver Creek Hatchery and Wildlife Area. If you are unable to make the hike, call Game and Fish to arrange a weekday tour between 7 A.M. and 3:30 P.M. The hatchery raises Apache trout, which was registered as an endangered species in 1967, but because of the intense recovery effort it has been upgraded to threatened status. Some fishing is allowed on the home streams of this native trout.

From October 1 to March 31, fishing along Silver Creek is catch-and-release using flies and artificial lures. Fishermen who want to taste their catch may use bait and keep six fish per day from April through September. The White Mountain Fly-Fishing group watches over the stream and sponsors improvement projects.

The trail follows Silver Creek as it winds, gurgles and ripples through meadows covered with high grass and flowers. Cattails grow thick in marshy spots claimed by great blue herons and mallard ducks. A hawk watched us from the top of a cedar tree; other birds live here year-round or stop on their migratory trips.

The trail ends at the hatchery where the spring bubbles up near large malapai rocks, forming the headwater of Silver Creek, the lifeblood of a string of nearby small towns. Flowing north about 47 miles to the Little Colorado River, the stream's year-round water has lured settlers since ancient times.

Returning to Bourdon Ranch Road, continue



north one-quarter mile and turn left (west) onto Silver Creek Drive. This road goes 3.3 miles to White Mountain Lake, originally known as Daggs Dam Reservoir. In the 1960s, the lake became private, for residents' use only, and the name changed. Today, the area is home to about 1,200 people. The lake allows private fishing only, but there is a small store open to the public.

Started in 1906, Daggs Dam Reservoir provided irrigation water for the communities of Shumway, Taylor and Snowflake. It was dedicated in 1914 when, according to Albert J. Levine's *From Indian Trails to Jet Trails*, "60 carriages and wagons, 11 automobiles and more than 400 people attended the event."

By 1917, Apache Railway tracks crossed the dam. In 1973, the train proved to be a blessing when the crew discovered the top of Daggs Dam caving in and radioed ahead the warning. Low-lying portions of downstream towns were evacuated while crews worked all night to keep the dam from breaking.

Living in Snowflake, I remember being roused from sleep by a police car, lights flashing and loud speakers warning us to leave. I bundled up my 3-year-old daughter and headed to my



[OPPOSITE PAGE] The blue ribbon of Silver Creek meanders through the post-harvest farmland of Shumway in east-central Arizona.

[TOP] Sparkling in afternoon sunlight, Silver Creek lazies between banks lined with cattails, marsh grass and cottonwood trees.

[ABOVE] A former Bourdon Ranch tack house, now used for Arizona Game and Fish Department equipment storage, provides a bright spot of color near the Silver Creek Hatchery.



in-laws' house on higher land. It took nearly \$400,000 worth of repairs on a dam that originally cost \$40,000 to avert disaster.

From White Mountain Lake, backtrack on Silver Creek Drive to Bourdon Ranch Road and turn left (north). Drive to Silver Creek Golf Course, where the public is welcome. Mexican Lake, on the left, holds any overflow from White Mountain Lake and, depending on weather conditions, runs either bone-dry or brimming full.

The Apache Railway suffered a holdup of sorts near here in its early days. The railroad purchased right-of-way access through private land, but

[TOP] A wisp of smoke from a nearby chimney hovers over frosty Shumway pastureland early on a November morning. [ABOVE] Etched names of former students embellish the Shumway Schoolhouse bricks. [OPPOSITE PAGE] Built from 1900 to 1904 of locally made bricks, the recently restored Shumway Schoolhouse is Arizona's only remaining brick one-room school.

Frank Baird, a rancher located below Daggs Dam, hadn't received his payment. He barricaded the tracks, forcing the train to halt. A.B. McGaffey, owner of the railway, happened to be on board and climbed down to see about the ruckus. Baird demanded payment and McGaffey promised to mail a check, but Baird made McGaffey pay cash immediately, then the barricade came down.

Just past Milepost 11 on

Bourdon Ranch Road, unpaved Shumway Road veers to the left (west) for 3 miles and a postcard-perfect view of pastoral Shumway, settled by Mormon farmer Charles Shumway in 1881. Zigzagging down the hill, the road goes into Shumway and then crosses Silver Creek on a 10-ton-limit bridge.

The one-room Shumway Schoolhouse, in use from 1904 until 1944, stands one block past the bridge. Students carved their names in the soft red brick walls. Peer inside the windows to see the restored schoolroom.

Turn right (north) at the schoolhouse on Old Schoolhouse Road and follow the original road from Shumway to Taylor. The road curves past wild plum trees and apple orchards. A bridge crosses Show Low Creek, a tributary of Silver Creek, 1.4 miles after the schoolhouse. About 2 more miles and the road ends at State Route 77 on the southern end of Taylor.

This back way isn't the fastest way to get from Show Low to Taylor, but when you can see Apache trout and an old schoolhouse, who's in a hurry? 🍷



WARNING: Back road travel can be hazardous if you are not prepared for the unexpected. Whether traveling in the desert or in the high country, be aware of weather and road conditions, and make sure you and your vehicle are in top shape. Carry plenty of water. Don't travel alone, and let someone

at home know where you're going and when you plan to return. Odometer readings in the story may vary by vehicle.

ADDITIONAL INFORMATION: Silver Creek Hatchery and Wildlife Area, (928) 537-7513, www.gf.state.az.us; Show Low Chamber of Commerce, (928) 537-2326, www.showlow.com; Snowflake/Taylor Chamber of Commerce, (928) 536-4331, www.snowflaketaylorchamber.com.



KEVIN KIBBEY



Entrepreneurial Money Went Down the Hole at Meteor Crater

EVER HEARD IT SAID that someone was pouring his money down a hole in the ground?

Daniel M. Barringer, a lawyer and mining engineer, spent the last 27 years of his life doing just that, desperately trying to prove that a vast circular depression in northern Arizona was actually a meteorite crater.

Unless someone looked down inside from the rim, the formation appeared as a small hill known locally as Coon Butte. When Barringer's theory was validated in the 1960s, Coon Butte became Barringer Meteorite Crater, or simply Meteor Crater. But his dream of

mining the giant meteorite never materialized.

A half-billion years ago, an asteroid collided with another space object, and a meteoroid—150 feet across, weighing 300,000 tons—broke off. For 50,000 years, it hurtled through space at approximately 40,000 mph, before crashing into northern Arizona with the force of more than 20 million tons of TNT.

The exploding meteorite left behind a crater, 4,000 feet wide and 700 feet deep, forming a rim that still stands 150 feet above the surrounding plain. Most of the meteorite melted within milliseconds of contact, but tons of fragments spewed up to 10 miles from the impact. Even though erosion filled in the crater to 600 feet deep, 20 football fields could fit on its floor and the crater's sloping sides could accommodate 2 million seated fans.

In 1871, an Army scout first recorded the crater. It was assumed to be a volcanic cone until 1886 when shepherd Mathias Armijo picked up some strange, heavy rocks. Analysis proved the rocks were 92 percent iron, 7 percent nickel and .5 percent cobalt, with a few trace elements of platinum and iridium. In other words—meteorites. The nearest post office was at Canyon Diablo, so

the estimated 15 tons of meteorites found nearby were called "Canyon Diablo irons." The largest, the Holsinger Meteorite, weighs 1,406 pounds and is on display in the Meteor Crater Learning Center.

Barringer first learned of the unusual crater in 1902 from Samuel J. Holsinger, who casually mentioned the legend that claimed it was formed by an object falling from space. Barringer investigated the site, became convinced it was indeed a meteorite crater and his obsession began.

However, G.K. Gilbert, the most famous geologist of the time, already had declared the crater the result of a volcanolike steam explosion. Gilbert was well liked, while Barringer was abrasive and argumentative, so most scientists chose Gilbert's hypothesis.

Barringer organized Standard Iron Co., issued stock and obtained a patent for a mining claim. Reasoning the meteorite was still in the bottom of the crater, he planned to extract it with a simple hoist and sell the ore.

Barringer's expedition soon met with reality. Quicksand, dense rock, water, bent and dulled

drill bits, temperature variations from 105 degrees in the summer to below zero in the winter, and vicious wind all stymied the fortune hunters.

By 1909, Barringer had drilled 28 holes, but failed to find the meteorite as his detractors were quick to point out. He continued searching until his money ran out in 1928. A final insult occurred when a 1928 *National Geographic* article titled "The Mysterious Tomb of a Giant Meteorite" admitted the impact possibility, but gave credit for the theory to Gilbert, Barringer's nemesis. New calculations proved, even if located, the value of the meteorite minerals couldn't cover extraction costs.

Discouraged, Barringer died in 1929 of a heart attack, never believing the theory that most of the meteorite was obliterated on impact in a molten metal mist.

In the 1960s, geologist Eugene M. Shoemaker proved the giant bowl formation was indeed caused by a meteor impact. From 1964 to 1972, Apollo astronauts trained at Meteor Crater because of its similarity to lunar craters.

Shoemaker said, "I study craters on the Earth and wanted to be the first geologist to the moon." He died in 1997, but in 1999, the geologist's ashes accompanied the spacecraft Lunar Prospector to the moon.

Ironically, Meteor Crater's ultimate value did

not exist in its minerals but in scientific information and tourism. Eventually the Barringer family entered into a long-term lease with the Bar-T-Bar Ranch Co., owners of the land around the crater, to develop and manage the attraction.

Today, more than 300,000 people visit this Registered Natural Landmark each year. Elevators rise to the rim-edge educational center where a film and displays explain the phenomenon and guides lead walks along the rim. Meteor Crater is recognized as the best-preserved crater of its kind, and Barringer is finally justified for pouring his money down a hole. **AH**

EDITOR'S NOTE: See related story on page 4 of this issue



LOCATION: Approximately 35 miles east of Flagstaff.

GETTING THERE: Drive east on Interstate 40 to Exit 233 and turn south. Follow the signs to Meteor Crater.

HOURS: May 15 through September 15, 6 A.M.-6 P.M.; September 16 through May 14, 8 A.M.-5 P.M.

FEES: \$12, adults; \$11, seniors; \$6, juniors; free, 5 and under.
TRAVEL ADVISORY: The Meteor Crater Learning Center and the observation deck are open every day, though weather may cancel guided walks along the crater's rim. A 71-space RV park is nearby.

ADDITIONAL INFORMATION: (928) 289-2362 or toll-free (800) 289-5898; www.meteorcrater.com or www.barringercrater.com.



[OPPOSITE PAGE, TOP] The Barringer's Dream exhibit at the Meteor Crater Learning Center east of Flagstaff depicts the life of Daniel M. Barringer, who purchased the crater for mining purposes in 1902.

[OPPOSITE PAGE, ABOVE RIGHT] Measuring only about 2 by 3 feet, the Holsinger Meteorite on display at the learning center weighs in at 1,406 pounds.

[OPPOSITE PAGE, BELOW] Six hundred feet deep and covering 2 square miles, the crater attracts 300,000 visitors each year. ADRIEL HEISEY [ABOVE] Although visitors may not hike the rim on their own, guided tours begin each hour, weather permitting.

Nankoweap Trail Challenges Hikers, Rewards With Uncommon Views

[BELOW] Steadied by a sturdy walking stick, author Christine Maxa picks her way over the Nankoweap Trail's challenging terrain on the Grand Canyon's North Rim.

[OPPOSITE PAGE] The Nankoweap trailhead yields this awe-inspiring view from the edge of Saddle Mountain. Bourke Point is seen at upper right, center.



LOCATION:

Approximately 160 miles north of Flagstaff.

GETTING THERE:

To reach Forest Service Road 610 Trailhead from Jacob Lake, drive 26.5 miles south on State Route 67 (just beyond DeMotte Park Campground entrance), and turn east onto Forest Service Road 611; after about 1.4 miles turn south onto FR 610 and go 12.3 miles to the end of the road at the trailhead.

To reach Forest Service Road 445 Trailhead from Jacob Lake, drive about 20 miles east on U.S. Route 89A and turn south (right) onto Forest Service Road 8910 (House Rock Valley Road), which becomes FR 445; drive about 27 miles to the trailhead and stay on the right fork of the road.

ADDITIONAL INFORMATION: Kaibab National Forest, North Kaibab Ranger District, (928) 643-7395; www.fs.fed.us/r3/kai.

THE NANKOWEAP TRAIL from the Kaibab Plateau into the Grand Canyon, described by geologist Charles Walcott as “a perfectly frightful trail,” has never shaken loose from its longtime reputation as a challenging route. In 1881 Walcott and Maj. John Wesley Powell developed a treacherous path along an Indian trail so Walcott could get a better look at the Canyon’s rock layers.

Horse thieves later used the route to herd their plunder between Utah and Arizona, earning the trail a certain notoriety. A preposterous twist was added in 1924 when George McCormick of Flagstaff tried to orchestrate a deer drive (see *Arizona Highways*, July 2004), in which he planned to route an overabundance of deer on the North Kaibab Plateau down the trail and up another on the South Rim. The plan flopped because the deer didn’t cooperate.

The Nankoweap’s below-the-Rim infamy is well earned. The 4 miles of the trail above the Canyon traverse the Kaibab National Forest between House Rock Valley and the North Rim, presenting a hike that retains a bit of color, but mostly in cliffs and crags, rather than crime and crazy ideas.

Nankoweap Trail 57 crosses a segment of the Saddle Mountain Wilderness and ends as it meets a forest road and a second trailhead. This little-used route will appeal to well-conditioned hikers who like variety and views.

The views start early as the trail makes a dicey tumble down the descending plateau through a tangle of aspen. Along the way, a window opens through the trees, and hikers get a good glimpse of Marble Canyon to the east, and the dome of Navajo Mountain far to the northeast across House Rock Valley. The Grand Canyon flashes its rosy strata on the opposite side of the trail.

These arresting views stay in sight while the trail switches gears and makes a steep climb up a knob. On the way down the hill, gorgeous views of the Grand Canyon take over until the trail drops onto a

moody flat where the harsh elements have stunted the vegetation.

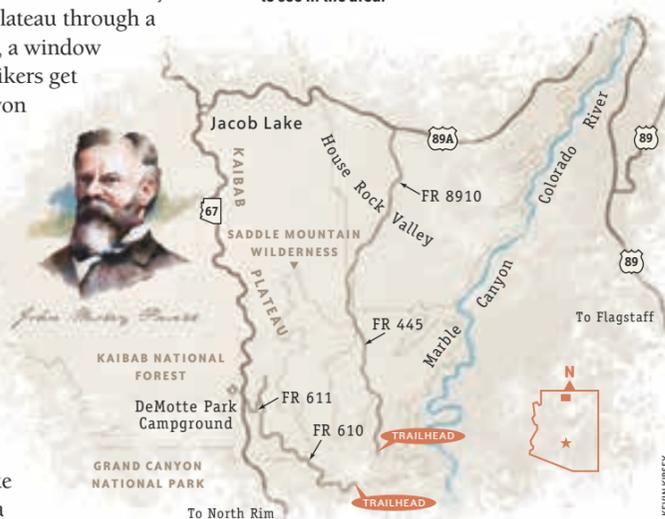
The trail then plunges down a north-facing cliff in an unforgiving way on a testy tread of sand, cobbles and pinecones in the Coconino sandstone formation, into the ruddy Hermit shale formation where it continues to drop, but at a less manic pitch, to an overlook at the edge of the Grand Canyon. Hikers going into the Canyon head straight ahead about 50 feet to where the trail begins its 11-mile hair-raising descent to the Colorado River. Hikers continuing on Trail 57 turn left at a sign pointing toward “Road 445G” and head into the wilderness.

From there, the trail rambles down the plateau through a loose-knit ponderosa forest. Stories say a man named John D. Lee had a gold mine somewhere in the forest. George McCormick, of the Kaibab deer drive fame, invested much of his time looking for the mine.

Like McCormick, hikers may not find the gold mine, but they will see a striking meld of rust- and tan-colored cliffs through the trees. The cliffs draw nearer the farther the trail descends, and seem to rub shoulders with hikers by the time the trail drops into a wash in the Supai formation.

The Nankoweap Trail ends at Forest Service Road 445. Hikers who don’t want to make the hard hike back up the plateau should plan to shuttle using two vehicles. Hikers in shape for the challenge can return the way they came for an instant replay of variety and views on the North Rim’s most colorful of trails. **AH**

Before you go on this hike, visit our Web site at arizonahighways.com for other things to do and places to see in the area.



KEVIN KIRBY



