THICK & THIN

Thick-billed parrots once were plentiful in Arizona, but today, the state has only six — all in captivity. This pair lives at the Arizona-Sonora Desert Museum in Tucson.

Thick-billed parrots have a long history in Arizona. The first documented sighting occurred in 1583, and the last took place in 1938 — by most accounts, hunting, not habitat loss, decimated the local population. Although an attempt to reintroduce the endangered species came up short in the 1980s and '90s, supporters aren't giving up. **BY MATT JAFFE**

PHOTOGRAPH BY **BRUCE D. TAUBERT**

WHAT A GLORIOUS RACKET IT MUST HAVE BEEN. What an incredible clamor filled a Chiricahua Mountains forest one August day in 1904, when a flock of as many as 1,000 thick-billed parrots *(Rhynchopsitta pachyrhyncha)* descended on Bonita Canyon near Cochise Head.

These birds, one of only two parrot species native to the United States, are not the retiring kind. They chatter and call, sometimes in single, high-pitched squawks audible more than a mile away, other times with staccato bursts that many people liken to human laughter. It's a fair bet that the miners in the area where the parrots appeared had never heard a bird make a sound like that. Nor had they seen one so exotic: brilliant green, with scarlet

across the forehead, above the eyes and on the shoulders. Boomerang-shaped yellow stripes on the underside of the parrots' wings flashed in the forest when the birds took flight.

Even then, more than 30 years before the last Arizona sighting of wild thick-billed parrots in 1938, the birds were not common in these mountains. So the miners considered the thick-billed parrots a sign of good fortune — though that didn't stop them from shooting several of the birds.

Now, Arizona is home to six thick-bills, all in captivity. I go to the Phoenix Zoo for a closer look at four of these federally and internationally endangered birds, whose remaining flocks are limited to high-elevation pine forests in Mexico's Sierra Madre Occidental range. In 2013, the population in Mexico was estimated at nearly 2,100 birds.

The zoo's parrots have prime digs, with flyways connecting two separate enclosures, plus a couple of California condors for neighbors. Bird keeper Lisa Murphy points out that the parrots have bonded into two pairs — one still tentative, the other well established. Chattering contentedly, that second pair is beautiful to watch as the male feeds and preens his partner after she emerges from a hole in a climate-controlled nesting log.

"OK, now go back to the nest," Murphy says to the female. Turning to me, she adds, "I looked inside with a mirror on the end of a stick. They have an egg in there."

This is the pair's third egg. The first was infertile; the second, they broke. Murphy says it sometimes takes a few attempts for the birds to get things right. I'm encouraged. As a wise woman once wrote, "Hope is the thing with feathers," and the egg symbolizes that there's still a future for a bird sometimes known as the Arizona parrot.

ALTHOUGH QUESTIONS remain about whether thick-billed parrots were sporadic or permanent residents of Arizona, their history here reaches deep into the Southwest's past. Along with the remains of macaws brought in from Mexico and Central America, thick-billed parrot skeletons dating to as early as A.D. 1125 were found at Wupatki Pueblo, where the birds were used for ceremonial purposes. The birds also appear on Mimbres ceramics from New Mexico, and there's a Parrot Clan in Hopi society, while the Kyaro Katsina is a parrot-like figure associated with rain.

The first documented sighting of what likely were thick-billed parrots dates to May 1583, when Antonio de Espejo's expedition — which explored the Rio Grande and the Verde Valley, among other Southwestern areas — described parrots by a river "surrounded by an abundance of grape-vines, many walnut and other trees." This reference is notable for both its early date and its northerly location outside present-day Flagstaff, where the parrots have never been spotted since.

An encounter with thick-bills was not just another bird sighting. In 1900, ornithologist Richard Lusk described a flock of the parrots "scolding and chattering and calling in a language which was neither English nor Spanish, but may have been some Indian tongue, or, indeed, that of the old Aztecs of Mexico themselves."

As their mountain-forest habitat suggests, thick-bills defy assumptions about parrots as tropical, jungle-dwelling birds. For their primary food source, the parrots rely on pine seeds, especially those from Chihuahua pines, trees that reach the northern extent of their range in Southeastern Arizona. The parrots hold and rotate the cones in one claw, systematically tearing off the scales with their bills to get at the seeds. It's a tricky enough maneuver that young parrots have to learn the technique from their parents before fledging at about 5 months.

Muscular and built like falcons, thick-bills are dynamic, agile flyers. During breeding season, they can cover 100 miles or more a day in search of food, flying to foraging areas 15 to 20 miles from their nests several times. And they execute acrobatic diving moves to avoid peregrine falcons, northern goshawks and other winged predators.

"They're much faster in flight than hawks. A little edge, and the hawks can't get them," says Noel Snyder, a retired wildlife biologist who helped direct the thick-bill release program that began in the 1980s. He lives in Portal and is also the author of a book about the extinct Carolina parakeets, the U.S. parrot species last credibly sighted in the 1930s. "Thick-bills are very social birds, so with more eyes, the hawks can't sneak up on them as easily," Snyder says. "The parrots habitually post sentinels. There's almost always one individual up top in the trees, looking around."

The thick-bills' range includes altitudes of nearly 12,000 feet. They're one of the world's northernmost and highest-elevation parrot species, which has earned them a seemingly contradictory nickname: "snow parrots."

In one account from the early 1900s, a rancher and mine owner wrote: "They would fly to a snow-covered limb, turn over, and grab the underside with their feet, woodpecker fashion, pulling themselves along with their bill after the acorns, and occasionally dropping into the snow after those that fell. Wading in the snow with their short legs, and solemn appearance, was very ludicrous, and gave us several laughs. The poor buggers were having such tough sledding, that I hadn't the heart to kill them."

THAT AUTHOR WAS ONE OF THE FEW. By most accounts, hunting, not habitat loss, decimated the thick-billed parrot population in Arizona.

In fairness to prospectors and others living and working in remote areas, the birds offered an easy subsistence food source. But farmers erroneously believed that the parrots ate crops and fruit in orchards. Still others shot thick-bills for novel trophies. So, along with the wonder at the parrots' sudden appearance came the cold calculus of slaughter. During one incident at Pinery Canyon in the winter of 1917 and '18, as many as 100 parrots were shot out of a flock of 300 — virtually all of them for taxidermy or skins.

Between 1986 and 1993, the Arizona Game and Fish Department, in conjunction with the U.S. Forest Service and the U.S. Fish and Wildlife Service, attempted to reintroduce the parrots into the Chiricahuas. The effort was based primarily on wild-caught birds that entered the illegal bird trade and were later confiscated from smugglers and aviculturists, but parrots bred in captivity were also used. The agencies hoped to establish a separate population from flocks in Mexico, which were considered vulnerable to habitat loss by logging and fire. According to the conservation group BirdLife International, less than 1 percent of the Sierra Madre's old-growth forests survive.

Snyder says that after decades free of logging, the forests of the Chiricahuas, though not pristine, presented promising habitat. But a combination of factors doomed the effort, which some likened to a federal feeding program for hawks.

The situation was more complicated than that, Snyder says. The captive-bred parrots had a high mortality rate, but the confiscated wild-caught parrots performed fairly well, flocking, nesting and eating pine cones as expected. But Snyder calls those birds' survival rates "not fully adequate," and at first, researchers attributed the losses to predation by hawks. Later, though, they discovered many of the confiscated parrots were sick.

"The hawks actually took a lot of parrots that were going to die anyway, birds that were failing and straggling from flocks. And if you have a straggler, boy, the hawks really go for them," he says. "Those confiscated birds may have looked healthy in captivity but had been exposed to disease."

The thick-bills' range includes altitudes of nearly 12,000 feet. They're one of the world's northernmost and highest-elevation parrot species, which has earned them a seemingly contradictory nickname: "snow parrots."

Then, drought conditions in the late 1980s decimated the released parrots' food supply. "We learned two lessons," Snyder says. "Don't use questionable birds, and don't do releases unless you're confident that the habitat will be good for the birds."

According to the Fish and Wildlife Service's 2013 addendum to its recovery plan for the parrots, conservation efforts are now focusing on the population in the Sierra Madre, where the Mexican government is trying to protect key breeding areas. Others, including the organization Defenders of Wildlife, have argued that the species' long-term survival strategy should also involve re-establishing the parrots in Arizona. And Chris Biro, a parrot trainer and onetime resident of Portal who founded the organization Bird Recovery International, has sought permission to breed thick-bills and eventually establish a population in the state.

"I'm an optimist about the overall conservation of thick-billed parrots," Snyder says. "But I'm also not sure it makes sense to reinitiate more releases here. We would have to subtract birds from Mexico, and while I'm not saying I wouldn't want to someday see parrots in Arizona, it's not the real conservation question. There are three preserves established in Mexico with major breeding colonies." He also notes that wildfires in Southeastern Arizona have impacted many of the area's pine-forest habitats.

It may be more a romantic notion than an environmental reality, but some way, somehow, I'd love to one day hike in the Chiricahuas or Huachucas and suddenly see a flock of thick-billed parrots swoop into the pines.

I'm not the only one. When I go to see the thick-bill pair at the Arizona-Sonora Desert Museum in Tucson, Shawnee Riplog-Peterson, the museum's curator of mammalogy and ornithology, also muses about that almost mystical experience. "What would it be like?" she wonders. "The sound. The color. Just to be able to see something like that. And then, all of a sudden, they disappear in the trees. If they don't make a sound, you'd never see them. You could be staring right at them and never see anything. And these parrots are big, gorgeous, colorful birds." AH

Though efforts to reintroduce thick-billed parrots to Arizona have failed, the species is doing better at three sites in Mexico.

PHOTOGRAPH BY GEORGE ANDREJKO

QUITE WRIGHT

Of the 532 Frank Lloyd Wright designs that were built, some experts say the David and Gladys Wright House in Phoenix is among the 20 most important. Although it had long ago faded from the public imagination, it was thrust into the spotlight in 2012, when a developer planned to demolish the iconic structure to make way for new homes. That's when a kid from the neighborhood stepped in.

BY MATT JAFFE ▣ PHOTOGRAPHS BY MARK BOISCLAIR

The unique shape of the David and Gladys Wright House conjures many interpretations. Some visitors say it resembles a coiled rattlesnake; others see a Gila monster.

As I catch my first glimpse of the David and Gladys Wright House in Phoenix's Arcadia neighborhood, one word pops into my head: playful. It doesn't seem like that could be the proper reaction to a building with this one's architectural pedigree. Built between 1950 and 1952, the circular concrete-block house opposite Camelback Mountain was designed by none other than Frank Lloyd Wright, David's father.

I associate a lot of words with Frank Lloyd Wright: genius, demigod, visionary. But Wright was not only an icon — he was an iconoclast, too. So, over his 91 years, he earned a host of less flattering descriptions, some of which he happily embraced: imperious, arrogant, megalomaniacal. Of course, the positives and negatives were by no means mutually exclusive for a man as complex as Wright.

I stay back a distance, then take a walk around the house for a closer look. The curving, cantilevered living quarters sit atop a set of piers, while towers and chimneys add a castle-like character to the building. The roofline extends over windows trimmed with weathered wood, and under sunlight softened by monsoonal overcast, the concrete-block walls almost resemble shingles. Sections of the house also remind me of the wide-brimmed pork pie hats, always worn to jaunty perfection, that Wright preferred.

Several people descend the graceful spiral ramp that follows the house's rounded contours. Among them are Zachary Rawling, who bought the structure in 2012 after it was nearly demolished, and Sarah Levi, Wright's great-great-granddaughter and now the house's scholar-in-residence.

The soft-spoken and friendly Rawling has a hint of formality about him; Levi, a relaxed ease. We exchange the usual pleasantries before I say: "I've been to a number of Wright houses, but this one seems a bit different. It has an almost whimsical quality about it." Rawling smiles and replies, "Oh, yes. There's no question Wright was having fun with the design. There's a lot of joy in it. This was one of only two homes that he created for his children. He went for it, design-wise. He was 84 when he received the letter from his son [asking him to design it], and this house was a culmination of a life spent in architecture. You can see elements from his entire career that are integrated and emphasized here."

Though Wright was no literalist, people project many interpretations onto the house. This is architecture as Rorschach test. Some notice the tooth-like detail running along the fascia and see a dragon's head. More appropriate to the desert, visitors have envisioned the building as a Gila monster. Still others construe the way the building circles back in on itself, and around a garden and pool, as Wright's attempt to conjure a coiled rattlesnake. It's also natural to speculate whether Wright, ever attuned to ancient forms, drew inspiration from the familiar spiral symbol present in Native American petroglyph panels. Especially because he titled the architectural drawings for the house *How to Live in the Southwest*.

OPPOSITE PAGE: The house's living room features whimsical carpet and a curving ceiling made of Philippine mahogany panels. **BELOW:** Towers and chimneys lend the structure a castle-like quality.

Whenever I walk into a landmark building, I feel like I've entered the architect's mind — and Wright's brain is quite a place to spend the afternoon. As colorful as the living room's balloon-inspired carpet may be (Wright filled his children's toy room with balloons on their birthdays), it's the complex geometry of the curving Philippine mahogany ceiling that commands my attention. Hand-cut on site, the ceiling is an intricate puzzle, with no two pieces the same size.

Ever in control, Wright took few chances with how he wanted people, including David and Gladys, to experience the house. Levi points out the built-in headboards in the bedrooms and how Wright was directing the view from the moment a sleeper woke up. The same is true of the house's orientation to Camelback, which Rawling says was clearly stage-managed. "There are too many clues that suggest he wanted to force your mind to look at it from certain angles," he says. "If altered to any degree, the impact wouldn't be the same."

Wright thought of any house that he built as somehow his own, but David and Gladys added their own tangible presence and turned a masterpiece into a home. An interior curtain hangs from a decidedly non-Wrightian fishing rod, and one of Gladys' old wooden cooking spoons props open a kitchen window.

Now it's Levi's turn here. "I can still walk into the bathrooms and smell their soap," she says. "Even with the change of ownership, Wrights have been the only ones to live in the home. I grew up coming here, but it's different to experience the house as a living structure for myself, versus someplace I just visited as a child."

Among life's truisms, the notion that you should never go into business with family is among the most irrefutable. That goes double for designing and building a house with relatives. But if you're David and Gladys Wright and you just purchased 10 acres 16 miles from your renowned father's Taliesin West, you can't exactly call up and say, "Pops, we've decided to go with Paolo Soleri for the new digs."

While two of his brothers followed their father into architecture, David was no slouch when it came to building. He worked for the Besser Co., which manufactured machinery that fabricated concrete blocks. "I'm a pretty good amateur engineer," he told Wright biographer Brendan Gill, and David ended up acting as general contractor during construction.

Wright had planned to build the house of wood, but David helped influence the switch to concrete block, which fortunately was a favorite building material of his father's. But David didn't shy away from pushing back against his formidable father.

In 1953, Wright was dissatisfied with the way the house appeared in a magazine shoot by Pedro Guerrero, with whom he had worked closely since 1939. Although the publication, *House and Home*, was perfectly happy with the photography, Wright insisted on a follow-up session. Guerrero returned from New York, probably for just a couple of pictures.

At the house, Wright didn't like the way the bougainvillea fell from the roof terrace, Guerrero recalled. David loved his bougainvillea and had trained the vine just the way he wanted. David noticed Wright and Guerrero fussing with the plant and confronted them. Father and son then engaged in a tense stare-down before the great man angrily roared off in one of the more than 50 cars he owned — most of them painted Cherokee red — but not before taking two bushels of grapefruits from the citrus grove.

David apologized to Guerrero, explaining, "If I let Dad win this one, I will never win another one." The bougainvillea, by the way, still grows at the house.

David and Gladys spent five decades in the house. He lived to 102, she to 104. When they moved in, no homes cluttered Camelback's lower slopes. Orange groves stretched along Arcadia's dirt roads, and from the house's elevated perspective, the Wrights could look toward Camelback over the tops of their citrus trees, a blanket of greenery so unbroken that it came to be known as "David's Lawn."

"He was 90-some years old and would still be up in the trees with a chain saw, trying to trim branches or pick oranges," Levi says.

Considering the building's significance, both on its own merits and as a precursor of sorts to Wright's most famous circular design — the 1959 Solomon R. Guggenheim Museum in New York — it's almost inconceivable that the Wright House was days away from demolition in 2012.

Of the 532 Wright designs that were built, some experts place the Wright House among the 20 most important buildings of the architect's career. But the structure had long ago faded from the public imagination. Except for its kitchen tower, the house remained virtually invisible from the street. Even many Arcadia residents didn't know it existed. Though few outsiders ever saw the Wright House, it remained a place of pilgrimage for architects and students at Taliesin West, some of whom trespassed for a view. "People tell me, 'Oh, I tried to get on the property and your great-grandfather chased me off,'" Levi says. "It's kind of fun, because that's how he could be."

When the house was sold after Gladys' death in 2008, the Wright family assumed the new owners would preserve it. But then the house was sold again in 2010, this time to a development company that planned to split the lot and build new homes. The lot division "ran through the front door of the house," Levi says, and a demolition permit was issued. After seeing the house he was hired to tear down, the contractor, concerned that a Wright design might be destroyed in error, contacted the city, which voided the permit.

Rawling grew up less than 3 miles from the Wright House, at 36th Street and Medlock Drive. His mother, Katharine, an elementary-school teacher, had attended architecture school at Arizona State University and came to revere Wright. Once Rawling learned to ride a bike, he and his mother would pedal along the Arizona Canal to see the Wright-influenced Arizona Biltmore and peek at the Wright House. Eventually, they took architectural road trips to visit Wright buildings around the country. All four years of college at the University of Virginia, Rawling kept a poster of the Wright House on his dorm-room wall.

An attorney by training, Rawling was working in Las Vegas building custom homes when noted architect Wallace Cunningham, a onetime Taliesin West student, told him about the Wright House's possible demolition. Almost immediately, Rawling moved to purchase the house, closing the deal in late 2012.

If not a fixer-upper, the Wright House needs fixing up. "The building, overall, is fragile," Rawling says. "In the 1950s, Wright was pushing all of the materials to the limit of their physical capacities. Our cantilever is out of level almost 2 inches and continuing to fall. The restoration is all about bringing life back to the original materials. And we want to make sure the structure lasts for centuries."

Rawling earned plaudits for saving the house, but his ambitious plans to make the Wright House the focus of a cultural center that would include an underground educational facility and a sunken garden pavilion, which could accommodate performances and community gatherings, drew heated criticism from some Arcadia residents. They worried about noise, traffic and the possible commercialization of the property. In an open letter to Rawling, one resident decried the prospect of the house being "turned into a Graceland of sorts to honor Mr. Wright."

Inspired by the tradition of music and dance events at Taliesin West and other Wright locations, Rawling says he believes architecture should incorporate all the arts: "If it's simply a house museum where people take a tour and leave, it's not a living tradition. We want people to form their own memories and to be active participants in continuing the legacy of the house. And we plan to be maximally deferential to both the historic structure and the neighborhood." (At press time, the process of obtaining a permit for Rawling's plans for the site is ongoing.)

OPPOSITE PAGE: Having been saved from demolition, the Wright House could soon see new life as a cultural center and performance venue. **BELOW:** A circular window brings ample light into the house's kitchen.

We settle into the master bedroom to take in what must be the definitive view of Camelback. There's a break in the monsoonal clouds, and their shadows race across the mountain's face as the light in the room brightens and dims almost by the second. The house, Camelback and the clouds seem of a piece.

"Every time of day, every season of the year, the light on the mountain does different things," Rawling says. "From here, Camelback looks gold on some mornings at sunrise. A lot of days, it goes bright red right at twilight. Then, as the monsoons come, you get the storm light and lightning behind the mountain's silhouette. This house is a never-ending celebration of desert life."

For more information on the David and Gladys Wright House, call 602-689-6140 or visit www.davidwrighthouse.org. AH

A wooden ladder leads to Tater Point Lookout atop a tall ponderosa pine near the Grand Canyon's North Rim. The lookout is one of dozens established on the Kaibab National Forest and in Grand Canyon National Park in the early 20th century.

PHOTOGRAPH BY TOM GAMACHE

UP FOR HOURS

Hours and hours alone, high above ground, looking into the distance ... that's the life of a fire lookout. That is, until a fire breaks out. It's a challenging job under challenging conditions. Although most lookout towers were made of steel, some were simple trees with wooden platforms. Those were especially popular on the Kaibab National Forest, and some of them are still around.

BY MATT JAFFE

OF THE 125-MILE TRIP, the final 80 feet — a sprint up the steel stairs of landmark Grandview Lookout Tower near the Grand Canyon's South Rim — are the toughest. After a lingering stop at Desert View and a stately procession behind a trio of slow-moving rental RVs, I'm late, and ever later, for an outing with Neil Weintraub, a Kaibab National Forest archaeologist.

The Civilian Conservation Corps constructed Grandview in 1936, but Weintraub plans to take me to a fire lookout that, by some measures, could be a few hundred years old. That's because the Hull Tank Lookout is a ponderosa pine, not a steel tower.

Long before the CCC began building permanent fire observation structures, the U.S. Forest Service established a network of tree lookouts on the Kaibab. Sometimes, rangers drove lag bolts into the trees to use as steps. They also improvised ladders, from wooden slats hammered into the trunks, for the long, dangerous climb to the top, where they could scan the surrounding landscape for smoke.

When I finally pull up at Grandview, I don't see Weintraub but spot someone in the tower's cab. So I start up the steps, and between the third and fourth landings, I meet a couple on their way down.

"Hey, is there a guy named Neil up there?"

"Oh, you must be Matt!"

I squeeze through the trapdoor and into the 7-by-7-foot metal compartment with its circular Osborne Fire Finder, a sighting device that observers use to pinpoint blazes. Smiling and gracious, Weintraub accepts my breathless apologies. Of course, there are worse places to have to wait for a laggard than this perch at 7,526 feet, with its view out over the forest and the Grand Canyon and all the way to Point Imperial on the North Rim.

We drive for a mile or so before setting out on foot for Hull Tank Lookout. Weintraub usually approaches from a different road but says it should take 20 minutes to reach the tree. He fiddles with his GPS and we traipse into the forest, stepping around stalks of mullein and stacks of logs from a thinning project.

The 20-minute mark comes and goes with nary a tree in sight. Our route turns increasingly circuitous, and Weintraub begins mumbling to his balky GPS before rebooting it. "I was so confident today, I'm like, *I'm going to leave my compass and topo map at home*," he says. "That's the thing about technology. Love it when it works. Or it can really screw you."

Wandering around the woods semi-aimlessly with a guy like Weintraub is not without its benefits. He grew up outside New York City and was a dedicated distance runner, then attended Iowa's Grinnell College, where he pitched and played center field as co-captain of the baseball

team. Weintraub came in as a math major, then pivoted to anthropology. Because of his late start, Weintraub needed a few credits, so he attended a Grinnell summer field course near Flagstaff and discovered Arizona.

Weintraub later lived in a chicken coop while working at the Museum of Northern Arizona and was "having the time of my life," as he puts it, when a Forest Service job came through in early 1988. He eventually took a full-time position with the national forest and since then has prowled around Northern Arizona, cataloguing sites from ancient rock art to Historic Route 66.

After 45 minutes, we come to a clearing, and straight ahead stands the Hull Tank Lookout. It isn't quite what I expected. I assumed a lookout tree would tower above its neighbors or stand on a prominent rise. Hull Tank, however, isn't appreciably taller than nearby trees. It's partway up a modest incline, and instead of the tapered symmetry of the grandest ponderosas, the tree looks lopsided because so many limbs were removed during its lookout days.

Partly obscured by branches, most of the observation platform remains where the treetop was hacked off about 60 feet above the ground. Fallen pieces of platform are piled up at the base, while two rows of lag bolts, staggered 2 feet apart so crew members could pull themselves up the trunk, lead skyward. A lightning scar traces a long gash for at least 10 feet in the cinnamon-colored bark.

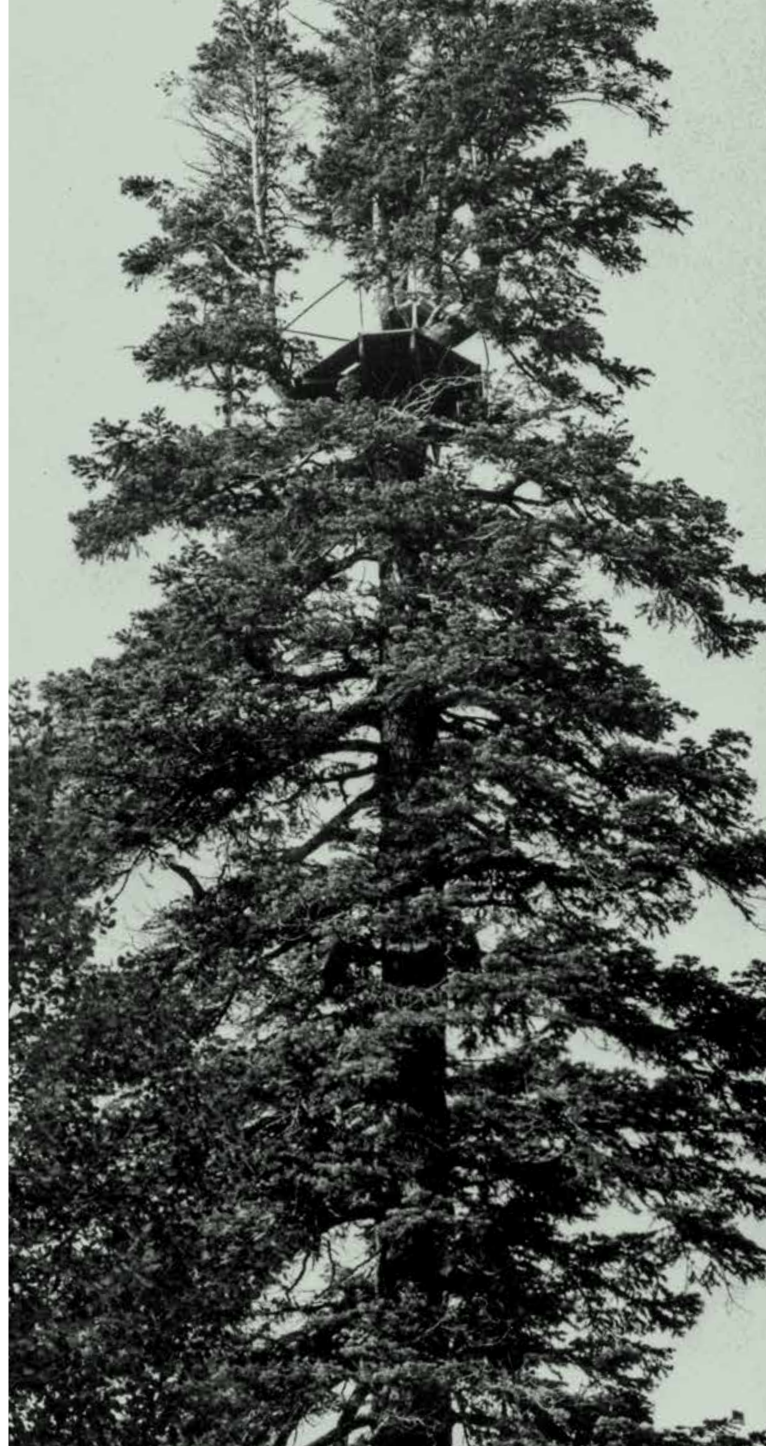
Weintraub takes out a 1916 picture of the tree. Some of the same dead limbs we can see are visible in the photo. One crew member has climbed a few feet off the ground, his right hand gripping the fourth or fifth bolt, while a second man, wearing a brimmed hat, poses nonchalantly next to a fire finder on the platform. A phone near the trunk's base probably connected to the Hull Tank Ranger Station, about 3 miles away.

The two men worked as a team: One acted as a spotter, and the other served as a smoke chaser. In one account from a nearby lookout tree, a ranger wrote, "We had an old spruce tree up there that we cut the top off of and built a little platform about three feet square. … We'd take our glass up there and look over the country for signs of smoke, and if we saw some anywhere we'd … get a fresh horse, get a partner and the two of us would ride back to find the fire. Sometimes we never found it; it had burned out before we got there. Mostly they were little lightning fires."

Men in trees. Weintraub and I are jazzed.

"That's the cool thing about these lookout trees. This was the very beginning of fire suppression," Weintraub says. "They were instituted in the early 1900s, in response to the big fires in the Northwest, to protect timber and mining interests. The Forest Service was suddenly the fire service. Suppress. Suppress. Like it or not, a lot of things started to change in these forests."

I WONDER WHY THE FOREST SERVICE bothered with so many lookout trees on the Kaibab. Starting in 1905, 37 were established, 33 of them on what today is the North Kaibab Ranger District. The threat to life and property would have been minimal, even if the threat to timber wasn't. Grand Canyon Lodge didn't open until 1928, and even now, there's little development and settlement north of the Canyon. But the original manual for Forest Service rangers, published in 1906, was unambiguous: "Officers of the Forest Service, especially forest rangers, have no duty more important than protecting the reserves from forest fires." The lookout trees formed the first line of defense.



A ponderosa pine cradles a lookout platform in October 1941. The topography of the Kaibab Plateau made lookout trees necessary until the advent of commercial aviation.

The man who knows the most about Arizona's fire lookouts is Dave Lorenz, a retired Northern Arizona University administrator. He grew up in Muskegon County, Michigan, and indirectly came to fire lookouts by way of his boating days on the Great Lakes. After moving to Arizona in 1982, Lorenz went hiking at Kendrick Peak near Flagstaff and came upon his first lookout tower.

"In Michigan, my hobby had been lighthouses," he says. "So here I am in Arizona, and I was just hiking up the Kendrick Trail, and not to go to the lookout, either. But I find this thing. Sticking up in the air, like a lighthouse. I started going to see more. And the characters! The people running the lookouts were such an interesting lot. Later, I got in touch with the Southwestern Region Forest Service people in New Mexico and asked whether anyone had ever been to all of the lookouts. And they just said, 'Who would really want to do that?' "

The short answer was Lorenz. He visited all 83 fire lookouts still standing in Arizona, only 75 of which are still around today, and researched their histories. Lorenz also documented a later generation of lookout trees, the 22 the CCC established in Grand Canyon National Park. Many of those lookouts used white firs, not ponderosa pines, and featured metal ladders, fabricated at the Canyon, that were bolted onto the trunks.

In 1967, when he was 18, Arizona State University environmental historian and author Stephen J. Pyne went to work with North Rim firefighting crews. He remembers rebuilding and frequently using the lookouts, which supplemented the North Rim's two steel towers, one of which was manned by writer Edward Abbey.

Pyne says lookout trees became common at the Grand Canyon and on the Kaibab because of the area's plateau topography. "In places like the Northwest, there are peaks, and you can pretty well sight fires from those high points," he says. "But the North Rim is a shallow inverted bowl with all of these ridges and ravines. It's very hard to orient yourself, and you need two sightings in order to triangulate a location. If you can't see the fire from two spots, you're stuck."

You had to get above the forest canopy. And so the lookout trees on the Kaibab and the North Rim were probably the last of their kind used in the United States. What ultimately rendered the Grand Canyon's tree and tower lookouts obsolete, Pyne says, was the increase in commercial aviation. Smoke gets spotted more easily from the air, and then, local planes and helicopters can direct crews in.

"It's much harder to find a fire from a lookout sighting," he says, before mimicking a spotter's jargon: " 'Well, it's the northwest quarter of the southwest quarter of Section 32, Township 32, north range 3 east.' Wow! Yeah, that's pretty accurate. But where the hell is it on the land?"

WHETHER IT'S IN A TREE or a tower, there's magic to a fire lookout, especially if both Zen mystic and Smokey Bear mingle in your soul. I, for one, love the idea of days alone, high above ground, looking into the distance and seeing nothing — that is, until the smoke rises and your whole world changes.

Pyne says the "sub-subgenre" of fire lookout writing has added to the towers' mystique. Jack Kerouac and poet Gary Snyder both wrote about their stints in towers, and Abbey, Pyne says, served as the North Rim's last lookout, though he wasn't especially taken with the role. "I requested a desk job," Abbey said in the recording *Freedom and Wilderness*. "The chief ranger thought I lacked the competence to handle government paperwork. He offered me instead the only job in the park that required less brains, he said, than janitor, garbage collector or park superintendent. He made me fire lookout."

After Hull Tank, I'm eager to track down more lookout trees, so I head to the North Rim to meet my buddy, landscape photographer Tom Gamache.

We go searching for Tater Point Lookout. Neither of us has a GPS: Tom, who drives a 1972 Chevy Blazer, does what he can to stay off the grid, and though I'm not a total Luddite, I do appreciate that you don't need to recharge a paper map.

I isolate Tater Point to a square-mile sector on the Forest Service's Kaibab map. We turn off of State Route 67, traveling through burned forests that open in places to the Vermilion Cliffs and distant Navajo Mountain. Yellows and oranges mottle stands of changing aspens, and Tom dodges deep troughs of water from recent rains before turning onto the road where we hope to find the tree.

A Civilian Conservation Corps member climbs a lookout tree near Tiyo Point on the Grand Canyon's North Rim in July 1935.

Tater Point must be about 30 yards off the road somewhere in the next mile. It's like looking for a needle in a haystack, except that we can't see the tree for the forest, to both mix and mangle metaphors. By definition, there are many, many ponderosa pines in a ponderosa pine forest.

Tom slowly rolls us down the road until I spot what look like silhouetted lag bolts coming out of one tree. We get out, only to realize that they're just dead branches. I tell Tom to follow in the truck as I start walking parallel to the road. Then, before he even gets back to the Blazer, Tom whistles and shouts, "Got it! There's a ladder going all the way to the top of a tree here!"

Somehow, we have stopped almost directly opposite Tater Point Lookout. It's a beauty, more majestic than Hull Tank — 100 feet tall, with an eight-section wooden ladder assembled from rungs attached to vertical two-by-fours. We trace the weathered ladder's course as it leads skyward and seemingly back into the past, to a time before cellphones and drones, when, if you wanted to look out, the first thing you had to do was go up. AH

PHOTOGRAPH: COURTESY OF NATIONAL PARK SERVICE

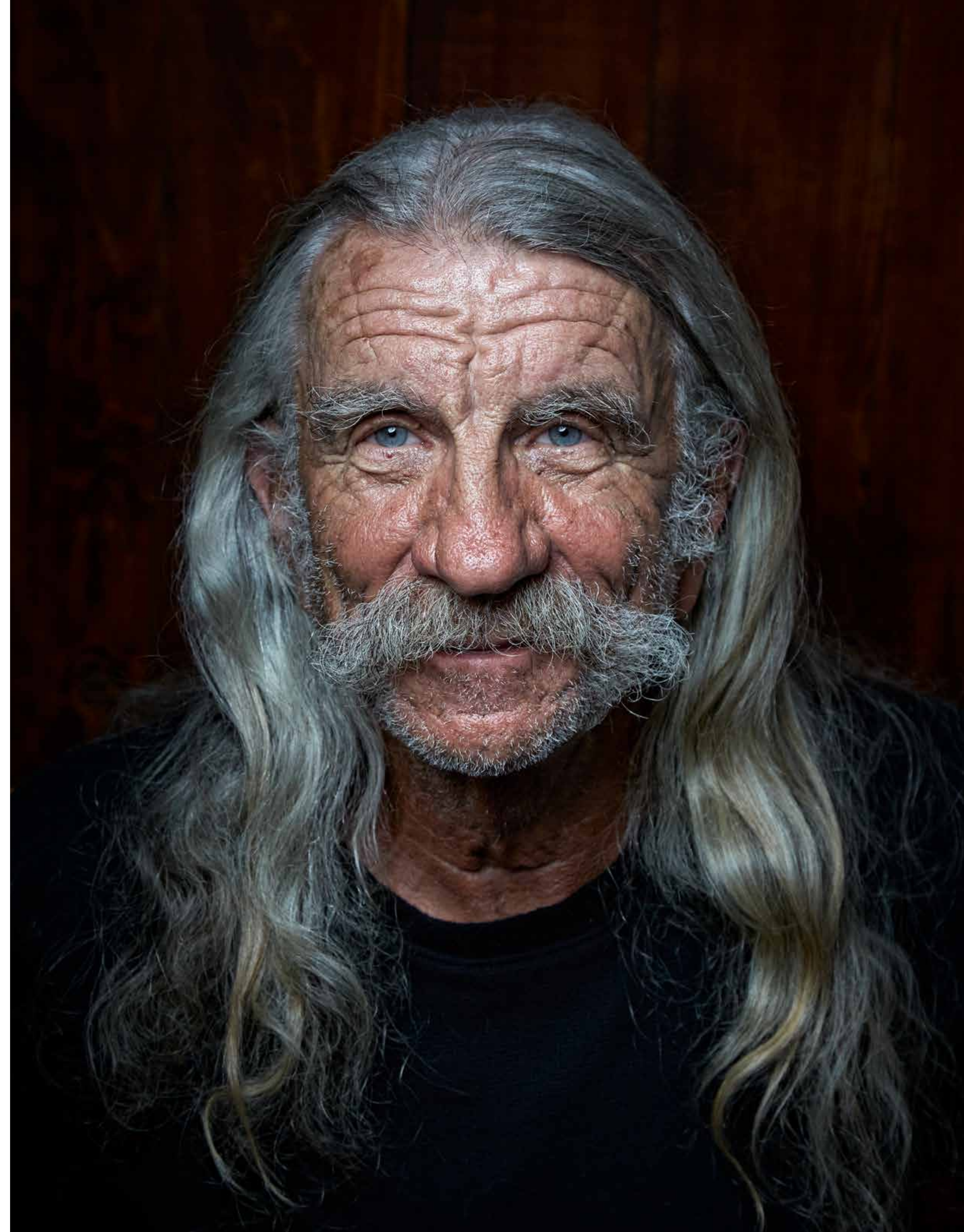
PHOTOGRAPH: COURTESY OF NATIONAL PARK SERVICE

Out of the ORDINARY

EVEN AT A PLACE LIKE THE GRAND CANYON, WHERE THE PER CAPITA OF OFFBEAT CHARACTERS IS WELL ABOVE AVERAGE, ERIC GUEISSAZ STANDS OUT. NOT ONLY DOES HE LIVE OFF THE GRID IN A HOUSE MADE OF ROCKS, HE LOOKS AS IF HE BELONGS TO ANOTHER TIME — LIKE SOMEONE OUT OF A TINTYPE PORTRAIT.

BY MATT JAFFE

PHOTOGRAPHS BY DAVID ZICKL



I haven't seen Eric Gueissaz in 16 years,

but his is a face that you don't soon forget. With clear blue eyes, an epic nose that knows no end and a bushy, drooping mustache extending across his cheeks, he looks as if he belongs to another time — like someone out of a tintype portrait.

Gueissaz is, in fact, a throwback, part of a long tradition of outsiders — adventurers, artists, rogues and eccentrics — who discovered the Grand Canyon and then made the chasm their life's great passion and cause. Like those who preceded him, this 75-year-old native of Switzerland and long-distance hiker would never presume to "know" the Grand Canyon. Instead, he revels in an endless journey of discovery.

"I look at the Canyon every day, and it's still almost like seeing it the first time I was here," he says. "People will ask what my favorite place is in the Canyon. I don't have any. Everywhere I go that is a new place is just as important as the place that I saw before. The terrain is new. The area is new. You don't ever 'know' it."

Mike Buchheit, director of the Grand Canyon Association Field Institute, has known Gueissaz for 21 years. "I'd put him up there with some of the legendary long-distance hikers here," he says. "Eric has seen a whole lot of the Canyon and taken some pretty ambitious and gnarly hikes. But he's the furthest thing from a self-promoter. Eric is more of a poet-philosopher. If he comes upon some tourists in a chance encounter, he'll share his passion and stories and make sure they're set up for success."

Gueissaz (pronounced "gay-suh") and I arrange to meet outside Maswik Lodge, and I quickly spot him, gray ponytail trailing past his shoulders and arms filled with newspapers for his wife, Susie. She's hanging out at Highland Mary, the historic 1899 mining claim, a few miles from the park boundary, where the couple live on the South Rim.

Gueissaz greets me warmly, and we climb into his pickup, then head down a dirt road that quickly leaves the park and crosses into the Kaibab National Forest, where he and Susie are the only year-round residents on the entire Tusayan Ranger District. Gueissaz says even though the road hasn't continued across his land since the 1980s, visitors directed by outdated smartphone maps still arrive at his gate.

"They come down the road, and then they can't figure out why it doesn't go though. Technology is outpacing reality, and people just don't get the message," he says. Pointing at my phone, he adds, "It's really strange how it works. They look at this thing and think it's going to take them to heaven. It takes them to hell, that's what it does."

Mini-rant aside, Gueissaz is anything but a curmudgeon. Forty years of exploring the Grand Canyon — "up and over and around," as he and his friends like to put it — and the decades-long creation of his off-the-grid ponderosa pine paradise have given Gueissaz a sincere appreciation of his good fortune and a rare, often whimsical wisdom: "We all know the pasture is always greener on the other side of the fence. True! But is it edible?"

He's a pleasure to listen to, thanks to a still-rich accent and a lyrical, free-form delivery that bobs and weaves, sometimes punctuated with a few favorite phrases ("So be it" and "There you go") for emphasis, as the conversation ranges from the nature of time to Swiss dairy cows with nary a pause.

"The other day, I was driving the shuttle bus to the North Rim and telling the passengers stories about the Canyon," he says. "One fella from Maine says, 'You know, Eric, I don't know you. And you don't know me. But from what you said, you never could have dreamt all this, could you?' 'No,' I said. 'Never. Not in a million years.' And that's exactly right. To me, it's wonderful. Sometimes you get more out of life without expecting or planning anything."

Eric Gueissaz has been exploring the Grand Canyon since the 1970s, and at age 75, he still hikes in the natural wonder for up to 10 days at a time.

The automatic gate balks as we arrive at Highland Mary. "C'mon, sweetheart, c'mon," Gueissaz says. "Sometimes she's stubborn. For the most part, she goes, but today is Sunday. So maybe she's resting."

Once granted entry, Gueissaz continues a short way to a stone house set in a clearing near a stand of old-growth ponderosas and a couple of hundred yards from the tracks of the Grand Canyon Railway. Gueissaz delivers the newspapers to Susie, his wife of 34 years, whom he met not long after arriving at the Canyon in 1972. Her parents worked for the Fred Harvey Co., and she grew up here. "I look at Susie and feel I just showed up yesterday, you know?" he says.

When he moved to Highland Mary in 1973, the house was little more than a shell, with no electricity, heat or running water. Originally, only the front and the chimneys were constructed of stone, but Gueissaz says he became obsessed with turning it into a true rock house. He gathered local boulders by hand, then, through trial and error, figured out the proper mud mixes and building techniques.

Trailed by Sparky, one of his three dogs, Gueissaz leads me to the vegetable garden, where his cat Lulu sometimes earns her keep by lying in the shade of the rhubarb leaves and waiting for unwary mice. He and Susie have mastered high-elevation farming and grow a surprising variety of crops — tomatoes, Swiss chard, beets, turnips, leeks and kale among them. "But gardening at 7,000 feet, oh, it's a deal," he says.

A wooden shed houses an inverter and batteries for the solar power system, and he collects rainwater and snowmelt, which are gravity-fed back to the house. We walk inside, where he shows off the greenhouse and its tropical, grotto-like shower. Just about everything on the property has a backstory: Some windows came from El Tovar Hotel, while the outdoor grill — which Gueissaz fires up for 200 guests during an annual Swiss independence celebration that can last for three days — once was part of the kitchen at Bright Angel Lodge.

He points out a green Eastern Windsor cookstove, circa 1920, brought years ago by a buddy. "It was mine to be had, so thank you very much," Gueissaz recalls, before describing how the house came together over the decades. "A little bit here, a little bit there. Friends stop by and help you. You find old bricks, then some beams from another place, and go for it. Eventually? You really got something.

"Who would have ever thought of all this to become a reality? When, in reality, there was no reality to go this way?"

LEFT TO RIGHT: Eric Gueissaz plans his next Grand Canyon trip with his wife, Susie. Gueissaz reads in the greenhouse of his home at a historic mining claim on the Kaibab National Forest. Gueissaz's living room, like the rest of the house, has been pieced together over four decades.

"THAT'S ONE OF THE THINGS YOU HAVE TO UNDERSTAND TO GET OUT OF THE CANYON WHEN YOU'RE HIKING: THE GEOLOGY IS GOING TO SAVE YOU. BY KNOWING THE GEOLOGY, YOU CAN ALWAYS FIGURE A WAY OUT." — ERIC GUEISSAZ

Exactly how a Swiss national from that country's French-speaking Romandy region ended up living a latter-day frontier existence on the Coconino Plateau is a story with many chapters.

Born in 1940, Gueissaz grew up in Orbe, a small town north of Lake Geneva. Although Switzerland didn't endure the ravages that other European countries suffered during World War II, Gueissaz came of age during a time of social transition as a generation of men, including his father, returned from the war. As Gueissaz puts it: "They took a deep breath for about 10 years, then were able to look back and ask about the true meaning of life."

After serving his own compulsory stint in the military, Gueissaz asked similar questions before making a break from what he characterized as the still-entrenched ways of Swiss society. One day, he announced to his father that he had taken a job and was moving to Malmö, Sweden. "When I left Switzerland, I was 23, and everyone asked, 'Why do you want to go there? You got everything here,'" he says. "Well, excuse me!" He stayed in Scandinavia for about three years; "then, the horizon got even farther away, and there you go. So I came to this country."

Gueissaz figured he would live in the U.S. for a few years, which would give him time to learn the language, experience the culture and travel before he moved on to yet another destination. He worked in restaurants, first in New Orleans, then Salt Lake City and finally San Francisco, as it dawned on him that the U.S. is not only a nation, but a virtual continent, too. Arizona alone is seven times larger than Switzerland.

"Everywhere I went in the United States, it was different, especially in the '60s and '70s. Society-wise. Culture-wise," he says. "But after a while, I decided, *Enough with cities. Is this America? No. It isn't. It can't be. There's gotta be more than this.*"

He contacted a friend in the food business who suggested he call someone at the Canyon about a job, and soon, the Fred Harvey Co. hired him. He eventually worked as sous-chef at El Tovar and later owned and operated Café Tusayan for 10 years.

Gueissaz knew of the Rockies and the Sierra Nevada, but the Grand Canyon hadn't figured in his imagination while he was growing up. "I first saw the Canyon and this region, and it was like, *Whoa! What is this?* At first I couldn't comprehend it," he says. "*How did this place come about? How is this possible? Did someone take a dagger and, from one end to the other, dig in the dirt?* Then I learned about the geology. That's one of the things you have to understand to get out of the Canyon when you're hiking: The geology is going to save you. By knowing the geology, you can always figure a way out."

Gueissaz didn't explore the Canyon's depths right away. But his first trip was unforgettable. In February 1976, Gueissaz and four friends hiked down the Hopi Salt Trail to the Hopi Sipapu, a sacred spot near the Little Colorado River. The weather was good as the group descended from the rim along a rough path. Right away, however, Gueissaz slid and landed smack on a cholla. "I picked needles out my butt for a while," he recalls. "So be it."

They reached the Sipapu without any other incidents. Gueissaz describes seeing a domed cavity with prayer feathers and bubbling water fed by the Sipapu's connection to a volcanic thermal system. His friend Chuck got ready to photograph the Sipapu, but another friend, John, warned that would be sacrilegious. "Chucky said, 'Aw, hogwash, man; I'm going to take pictures,'" Gueissaz says.

The group camped under the stars. "I'm always a light sleeper in the outdoors," he says. "I sleep physically, but mentally I'm always aware, and about 3 in the morning, I feel something and think, *Oh, it's starting to rain*. We found shelter under an abutment of wall and made a fire. Then, at 6, I looked down to the river and saw ducks flying upstream and thought, *Uh-oh. Something is happening here*."

Snow started falling on the Little Colorado. By the time the group reached Chuck's truck, a foot of snow had piled up on the rim. Visibility was close to zero, and at first they couldn't get the camper open. Eventually, the group managed to reach Cameron to fuel up, then drove in four-wheel-drive back to Highland Mary, where, at 3 the next morning, the truck ran out of gas as they pulled up to the house.

"From that day on, I was hooked," Gueissaz says. "It was nice and sunny. Then someone takes some pictures and everything was different? There's gotta be more like that. Sure enough, there always was."

Though admittedly "no spring chicken," Gueissaz still explores the Canyon on hikes that can last up to 10 days. While Freckles, another one of his three cats, dozes and a classic cuckoo clock calls every 15 minutes, we settle into some chairs, drinking coffee and munching on cookies made with zucchini from the garden, as Gueissaz weaves more stories of his adventures.

Two years ago, he and his friend Bill set out on a hike on the Esplanade. The pair trekked down Kanab Creek and decided to go up an unnamed canyon because it had been raining and they figured the Esplanade's potholes would be filled with water.

The pair came to an area with fresh water and cottonwood trees, then stopped for a snack. Gueissaz looked around and suddenly, on an opposite wall facing north, spotted "a big, red painting of an ancient person." The whole area was filled with petroglyphs and pictographs that Gueissaz assumed very few people had seen.

"Like I said, the Canyon forces you to [go] up and over and around to see what else is there," he says. "There's always the unexpected. It emphasizes the unknown. That's the beauty of this place. You never know what you're going to find. And sometimes you find nothing of interest. But the journey in between the two points is what's always of interest. It's a wonderful place. A place of sanity that has kept me healthy, real and sane."

Then he adds: "There's this little light that should never be extinguished, a curiosity. That way, there's always a wonderment about things. It's what keeps a life a life." AH

THE LAST TRADING POSTS

For more than a century, trading posts were a lifeline in Northern Arizona, buying and selling blankets, baskets and Blue Bird Flour. But big-box stores in border towns, greater mobility and the decline of the sheep trade have led to the virtual demise of the 140-year-old system. However, there are a few left, and we sent our writer out to find them.

BY MATT JAFFE

PHOTOGRAPHS BY MARK LIPCZYNSKI

Teec Nos Pos Trading Post, located five minutes from the Four Corners, has been serving Navajos and tourists since 1905. Other trading posts in Navajoland haven't been so fortunate.

RED DUST EDDIES ACROSS U.S. Route 191 as my buddy Tom Gamache and I wheel past the low-slung sandstone mesas that extend off the Lukachukai Mountains. There are roadside rodeo rings and hand-painted signs touting revival meetings in a big, empty country, where flocks of sheep graze and the gusting wind ripples through expanses orange with blooming globemallows.

Pulling into historic Teec Nos Pos Trading Post, we're still in Arizona, if barely — five minutes from the Four Corners and 100 miles closer to Santa Fe, New Mexico, than to Phoenix. Ute Peak looms in Southwestern Colorado, while the dark mass of Mesa Verde and the snow-capped San Juan Mountains skyline rise to the east.

We're out looking for Arizona's last trading posts, and Teec Nos Pos is the real deal: a traditional business oriented to the local community, just as it has been since 1905. A propane-storage tower rises above a building topped by a corrugated roof and adorned with murals of Geronimo and other Native American icons. The canopy shading the gas pumps reads, in Navajo, *Ahe Hee Hagoonee*, with the English translation, "Thank You, Have a Good Day," just beneath it.

Inside the general store, skeins of yarn destined for weavings dangle over John Wayne puzzles, and a kachina figure stands above boxes of Hamburger Helper. A side room displays premium Navajo blankets, jewelry and baskets that can be had for a fraction of what you'd pay in Scottsdale.

It's no Circle K: A woman and her father deliver 71 pounds of mohair from their Sanostee, New Mexico, herd of Angora goats, and a medicine man out of Kayenta carries a ceremonial hand-tanned deer hide for trader John McCulloch to purchase.

"Tanning is a dying art; you can see the difference," says McCulloch, who has run the post since 1994. He and his then-wife, Kathy Foutz, whose family operated Teec Nos Pos and other trading posts for generations, took over then, and McCulloch continued to run the operation after he and Foutz divorced. "And they want a hide with no bullet holes, but with the ears, tail and all four hooves, if possible. From an animal that died a natural death, or maybe been hit by a car. Not shot. So a big, beautiful hide with no holes can fetch the better part of $1,000."

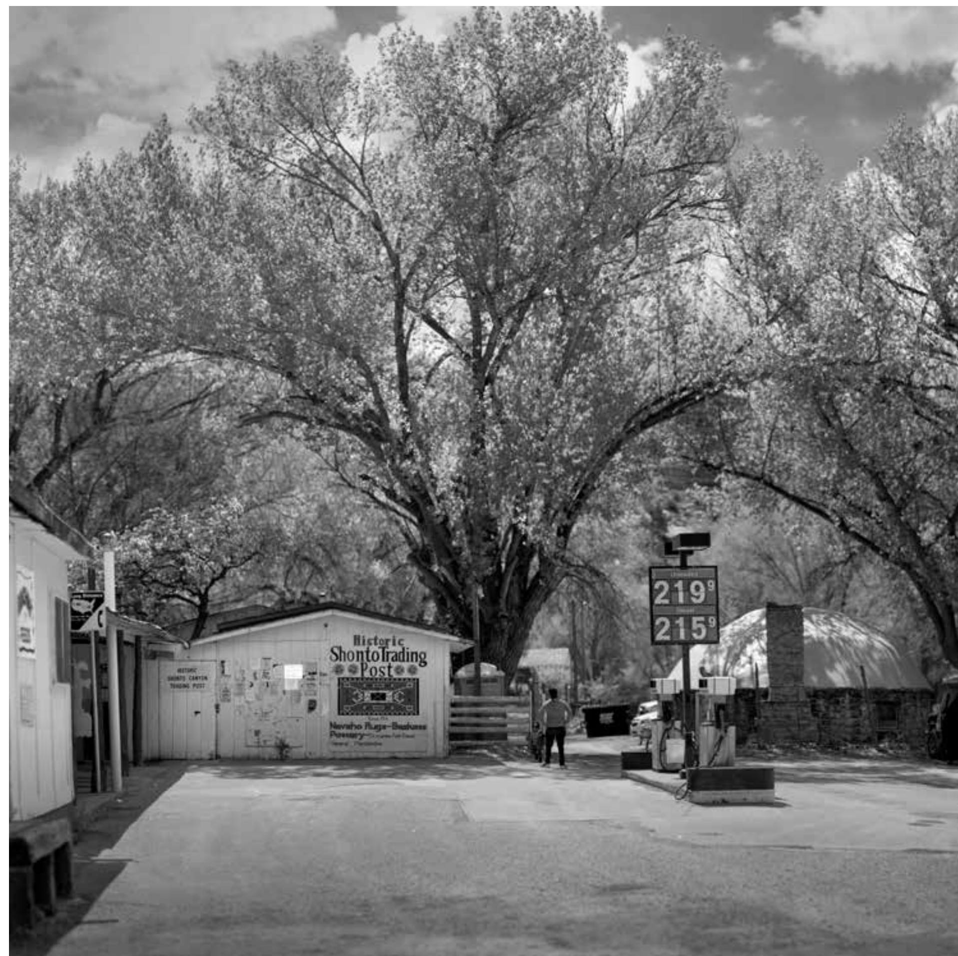
Not many authentic trading posts survive. Big-box stores in what the Navajos and Hopis call the border towns — Flagstaff and Winslow in Arizona, and Gallup and Farmington in New Mexico — greater mobility and the decline of the sheep trade have led to the virtual demise of the 140-year-old trading post system. Preserved as a national historic site, Hubbell Trading Post still operates. But most others have been converted into convenience stores. Or simply abandoned.

Running a trading post is both a business and a calling. Covering one wall in McCulloch's office are rows of handwritten bills of sale recording loans he has doled out.

"There's a drawer all full of them, too — probably half of them are uncollectable — and a filing cabinet where the top drawer is just dead loans," he says. "It changes your perspective on money. You can't mind losing a bit, because you're going to. I know guys who sold out a post with $200,000 in uncollectable loans on the books. It accumulates over the years. But when you divide by 30 or 40 years, it's not such a big deal."

Even so, McCulloch is no easy touch. Wearing a pale, blue-checked shirt and white straw Larry Mahan cowboy hat, he walks through the post, fielding questions from staffers and customers. An employee hands him a phone: Someone in New Mexico wants to cash a check. "Who's it from?" asks McCulloch. "Oh, your boss. Well, who's your boss? Mickey Mouse, or Donald Trump?"

That hint of impatience notwithstanding, McCulloch speaks softly and respectfully with those at the post. Lula Tom, a weaver from Sweetwater, and her husband, Ranson, want to show McCulloch the rug she just completed. McCulloch flatters her — he's off by a full 10 years when he guesses Tom's age — before the staccato negotiation begins. He knows her weaving, and she holds up the 20-by-30-inch rug, done in the distinctive Teec Nos Pos style.



Shonto Trading Post near Kayenta still conducts business in its original store building, which was erected shortly after World War I.

The walls of R.B. Burnham & Co., off Interstate 40 near the Arizona-New Mexico border, display Navajo weavings and other handmade items.

"So, how much you want?"

Tom coyly shifts back and forth, then smiles. "$550."

"I can go to $300."

"$350." Done deal.

WE SLIP INTO NEW MEXICO, then back into Arizona along Indian Route 13, traveling through 8,441-foot Buffalo Pass in the Chuska Mountains, before dropping into Lukachukai. Stray dogs, seemingly assembled from mismatched parts, laze outside the orange cinder block Totsoh Trading Post. The gas pumps are long gone from the island out front. There's the usual convenience-store fare, energy drinks and the like, but also lamb and calf formula, infant cradle boards and sacks of Blue Bird Flour, the go-to brand for fry bread.

Hank Blair has owned Totsoh with his Navajo wife, Vicki, since 1984. Four generations of family come into and out of the office as he waits for his new grocery distributor's truck, now running way late. Blair's father and brothers all worked in the trading post business, and his mother taught at the boarding school in Teec Nos Pos. He mostly grew up at Red Mesa Trading Post, where his mother home-schooled him back in the days when business was all trade and barter. Sheep provided the foundation for the economy: The Navajos paid their tabs with wool in spring and lambs in fall.

Then, in 1965, with the Beach Boys all the rage, Blair decided to become a surfer. Transitioning from Kayenta to "Cowabunga!" proved trickier than he anticipated. Blair discovered California water was cold and surfboards were heavy. "You can also drown," he adds.

After serving in Vietnam, Blair resumed the trading post life. Rug weavers still sheared their own sheep, then cleaned, dyed, carded and spun the wool. "Used to take a month to prepare the wool," he says. "Now, weavers just buy the wool. There are maybe a third of the sheep that there used to be. The wool market has gone all to heck."

Another change came a few years ago, when the federal government stopped issuing checks and instead went to direct deposit and debit cards. Blair's daughter, Cheryl, says until then, it was always an event when checks arrived. "I remember down there, oh, my gosh, the whole half of the store would be full of nothing but people for two hours," she says. "Talking. Gossip. The latest news. It was a big gathering to come to the store and wait for your check. That's completely stopped."

Blair looks at the business with a mix of stoicism and humor. "I'm too dumb to know how to do anything else," he says. "I make enough money to live, but not enough to leave."

His daughter suggests there's more to it than that: "People have known Dad from Kayenta to Chinle. He's actually part of something that's bigger. He's a trader. It's in our blood."

WE DRIVE TWO HOURS SOUTH to Sanders off Interstate 40, where, for going on 50 years, Bruce Burnham has operated R.B. Burnham & Co. with his wife,

Janice Day, a Hopi, and her husband have been running Tsakurshovi Trading Post on Second Mesa since 1987.

Virginia, a silversmith and goldsmith who grew up on tribal land. Wearing a bola tie and a black shirt stitched with his name in script, Burnham greets us in the wareroom, the showcase for the rugs, baskets and jewelry the couple has amassed over the decades.

Burnham is a fourth-generation trader. In the 1880s, his ancestors were Utah polygamists, but when the Mormon church and the federal government sought to ban the practice, his great-grandfather and great-uncle left Salt Lake City, probably bound for Mexico. They settled in New Mexico, where his great-grandfather drove a trading wagon pulled by up to eight horses. He would start in Colorado with a load of lumber, then trade for supplies as he traveled the Navajo Nation, stopping to see three wives living in different towns along the route. Eventually, every trading post in the northeastern part of Navajoland belonged to a Burnham or family in-laws.

"I spent the first five years of my life on the Navajo Reservation, and everybody I associated with was Navajo," Burnham says. "I felt at home with them. I thought there weren't very many white people and was shocked when we moved to town for my sister and I to go to school, then found it full of white kids."

Burnham didn't plan on the trader's life. But while driving a Coca-Cola delivery truck after leaving the Army, he stopped at Shiprock Trading Post. "I could smell the sheep pelts and the kerosene splashed on the floor. The Blue Bird Flour and the mutton fat from the meat we sell," he says. "What lured me back was all of those odors that I hadn't really smelled in 10 or 12 years. Hit me hard. Hard enough that I walked right in and applied for a job. That was where it all began again for me."

He worked at Red Valley Trading Post back toward Lukachukai, but in 1965, worried that the world was passing him by, Burnham left Arizona. Like Blair and McCulloch (who worked at a high-end pawn shop in Beverly Hills), he moved to California, landing in San Francisco's Haight-Ashbury district. "It was raging then. Beatniks galore," he says. "Finally I decided that wasn't for me and came back home."

Burnham's post is among the few that still accept pawn, the longtime bartering and banking practice in which customers can trade crafts and valuables for cash loans. Pawn has always offered Navajos a way to get small sums unavailable from conventional financial institutions, particularly between shearing and lamb season, when they earn no income.

Pawn is prohibited on tribal land, but Burnham's post sits on private property adjacent to the Navajo Nation. He unlocks the door to his pawn room, where rugs and buckskins stored in paper bags stack up on shelves and jewelry in sealed plastic bags hangs on the walls. He estimates the room holds up to 2,000 pieces.

The trader's hope, Burnham says, isn't to sell the item when someone fails to repay the loan on time. Traders actually want to avoid selling off what they call "dead pawn," because it can violate a well-meaning customer's trust. Plus, a rug or basket has greater value when pawned repeatedly than it does in a one-time sale to a tourist.

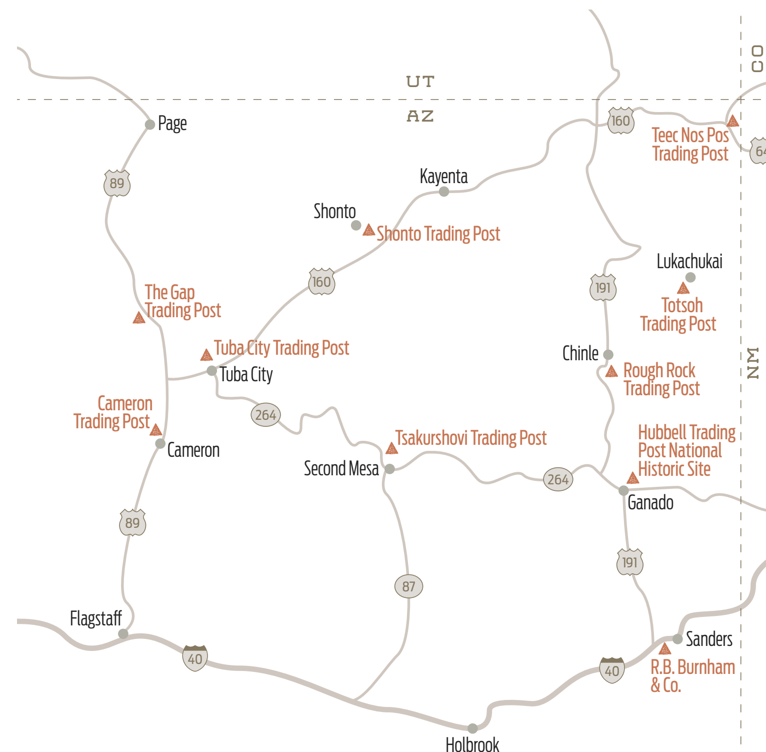
Even so, corrupt traders sometimes abused the system, and pawn came under fire in the 1960s and '70s. New regulations dramatically changed the business, cutting into trader profits. Many posts shut down or reopened in border towns, especially in New Mexico.

Burnham says he has to keep innovating. He and his daughter, Sheri, attended auctioneer school and now conduct rug auctions at such institutions as the Museum of Northern Arizona. With the closure of so many posts, weavers lost access to markets. The few remaining posts couldn't sell all the rugs being made, so now the auctions take the weavers' work to their best customers. Burnham recently auctioned $129,000 worth of rugs, with 80 percent of the take going to weavers. "The everyday person has to put a loaf of bread on the table. That's who we want to help," Burnham says.

He adds: "I'll admit it's an ego thing in a lot of ways. Someone asked me, 'How come you've stayed here so long?' And I said, 'Because when I'm here, I'm somebody.' I'm the kingpin. I'm really somebody. If I'm in town, I'm just another guy that dropped out of high school. Out here, I'm somebody. They look up to me; they respect me. We have a mutual respect and a caring relationship. That's what's fed me all these years."

FAST-MOVING CLOUDS SHADOW Keams Canyon as we work our way west, along State Route 264, to see Joseph and Janice Day at their Tsakurshovi Trading Post on the Hopi Tribe's Second Mesa. We find Joseph outside, next to his pickup, which is encrusted with red mud after he dug it in while checking his corn and bean fields.

When Joseph moved to the Navajo Nation from Kansas in 1965, the traditional ways prevailed among what he describes as the "long-hair-wearing, hogan-living, sheep-herding, Navajo-speaking, *National Geographic* Indians" he met. After answering a newspaper ad in the early 1980s, the couple started running Sunrise Trading Post at Leupp. The Days read letters to the locals and wrote letters for them, too. They bought and sold livestock and hay, and many customers signed the credit book with a thumbprint. Sometimes the Days even prepared tax returns. The couple loved their work. As for the post's manager?



MAP BY KEITH WHITNEY

Customers line up at the cash register at Totsoh Trading Post in Lukachukai. The post has been run by the Blair family since 1984.

"He treated everybody like they were over on their credit limit and wanted 20 bucks to go to Winslow and get drunk, you know? And you don't have to treat people like that," Joseph says. "I mean, there were some people, for sure, that was true. But most of 'em weren't. The Navajos hated him, and we finally quit. I could have worked there forever if it weren't for him."

The Days opened up their own shop in 1987, operating out of an 8-by-16-foot shack while living in the old trailer behind it. They didn't sell groceries, but, Joseph says, "We like to call ourselves the last of the old-time trading posts, even though we're only 30 years old."

While the fine collection of kachinas draws outsiders, the business focuses on Hopis and other Native American customers. The Days stock cottonwood root and mineral pigments for kachina carvers. There are fox skins and buckskins, deer hooves and turtle shells, as well as gourds for rattles and Hopi ceremonial textiles. Ninety percent of the baskets go to locals, who use them as a medium of exchange to pay for weddings and as prizes in ceremonial races.

Thanks to what Joseph calls "the Moccasin Telegraph," customers from far beyond the Hopi mesas find the store, from a war chief from Jemez Pueblo looking for pigments to a couple of Apaches up from San Carlos needing buckskins.

After a lunch of green chile pozole, Janice comes in and out, showing Joseph kachinas that carvers want to sell. The Days help keep alive a timeless Southwestern trading tradition, but though some of the old ways endure, Joseph has few illusions that things won't continue to change.

"Tell you a story," he says. "Old Navajo man walks in. Face like a wrinkled-up brown paper bag. Old man. *Real* old. He's got what must have been his great-granddaughter interpreting for him. He's looking for moccasins. We got the pair he needs. We got his size. He's standing there. A little short guy. He reaches into his jeans, and we know he's going to pull out, in traditional Navajo style, a wrinkled-up $100 bill. Dude pulls out his debit card.

"You know what happened to trading posts? The late 20th and early 21st century happened to trading posts." AH