

GREAT BALLS *of* FIRE

Considered by many to be “the mother of all peppers,” chiltepinos are the only chiles native to Arizona. They grow wild; they look like miniature, red Christmas tree ornaments; and, man, are they ever hot.

CHILTEPIN PEPPERS are tiny things. Almost cute. They’re invariably described as “pea-sized,” but they appear even smaller than that. Shining in the sun on a December afternoon and brightening their shrubs with pixels of red, the chiltepinos resemble minuscule Christmas tree ornaments.

I’m examining the ripe chiles on a chiltepin bush at the conservation center for Native Seeds/SEARCH, the Tucson-based organization dedicated to preserving stocks of seeds from indigenous Sonoran Desert plants. Kevin Dahl — a Native Seeds board member until recently, and the organization’s executive director before that — has brought me here on a meandering tour around Tucson to better acquaint me with what many people call “the mother of all peppers.” The chiltepin is the only chile native to Arizona, and Dahl says it’s considered the closest wild relative to domesticated chiles.

To truly know the chiltepin, you have to eat one fresh, straight off the plant. But considering these chiles’ fiery reputation, I hesitate before taking the first bite. Diminutive though they may be, chiltepinos inspire respect bordering on rever-

ence for their smoky flavor and fiery kick.

In my younger and less vulnerable years, I was an adherent to the philosophy that it’s not a real meal unless you break out in a sweat. My father served in India, China and Burma during World War II

and returned with a penchant for hot foods. As the first wave of Thai and Indian restaurants came to our Chicago neighborhood in the 1970s, he introduced the family to the sublime pleasures of dishes prepared with Thai and Kashmiri chile peppers. There was no higher praise around the table than the assessment: “It’s really, really hot. But good.”

Over the years, just as my vertical leap lost the fundamental element of verticality itself, my tolerance for extremely hot foods has also gradually dwindled. I’ve become the anti-Anthony Bourdain: increasingly timid around unfamiliar, spicy dishes.

But last year, while studying a map of Southern Arizona, I noticed a location called the Wild Chile Botanical Area in the Tumacacori Highlands, near Nogales. Growing as far south as Central America and northern South America, chiltepinos reach the northern limit of their natural range in the U.S.-

BY MATT JAFFE
PHOTOGRAPHS BY BILL STEEN



Mexico borderlands; in fact, Arizona is the farthest north that wild chiles are found anywhere in the world. Twenty years ago, Native Seeds/SEARCH worked with the U.S. Forest Service to establish the botanical area as a genetic reserve to protect, among other things, the largest concentration of chiltepin plants in the United States.

Before discovering the wild chile area, I’d never heard of chiltepinos by name, but in retrospect, I had seen them many times. They’re the little dried or pickled chiles you see in jars at some of Southern Arizona’s traditional Mexican restaurants. Chiltepinos become ubiquitous once you cross the border into Sonora, and some studies suggest that people in Mexico have eaten chiltepinos for nearly 10,000 years.

There’s an oft-quoted bit of Tarahumara tribal lore that says, “The man who does not eat chile is immediately suspected of being a sorcerer.” I’m more saucier than sorcerer, and my curiosity finally gets the best of me. The chile puts up the slightest resistance as I pluck it from the plant. Then I take a nibble, biting the chiltepin in half and exposing a cross section that reveals the seeds that harbor so much of the heat.

Dahl will have none of it. “You’re cheating,” he says. Prompted by his taunt, I tackle the rest of the chiltepin.

How do you describe “hot”? What’s the opposite of “numb”? The chiltepin’s burn immediately spreads through my mouth,

intensifying as it goes. The ripe fruit is much hotter than its dried form, and just as I’m starting to wonder when peak chiltepin will be reached, the sensation starts to mellow. Even so, a noticeable heat lingers, from my lips all the way down to the roots of my teeth.

For a few minutes, as my nose runs, I feel like I’m glowing from within. That bite of chiltepin is a concentrated blast of the Sonoran Desert itself: what the sun, the earth, just enough water and some hungry birds can produce.

BACK IN 1912, a pharmacologist named Wilbur Scoville took it upon himself to quantify the intensity of capsaicin, the chemical compound that gives chiles their heat. Working for a pharmaceutical company, Scoville was interested in salves, not salsa, and wanted to calculate the proper concentration of capsaicin for a topical painkiller his company produced. He developed the Scoville Organoleptic Test, a process that measures the intensity of chiles by ranking them in Scoville heat units, or SHU.

Coming in at a searing 2 million or more SHU, the Carolina reaper, a cultivar, is currently ranked as the world’s hottest pepper, although an ongoing chile arms race to develop even more scorching peppers perpetually threatens to topple it from the throne. Meanwhile, there’s a whole subgenre of YouTube

videos showing people’s reactions after biting into a Carolina. Hijinks ensue as the reaper wreaks weeping, retching and writhing, in no particular order. Definitely not safe for work.

By the reaper’s extreme standard, the chiltepin, topping out at an estimated 100,000 SHU, is relatively mild. But only by that measure. The chiltepin is at least 10 times hotter than your average jalapeño, and unlike the Carolina reaper and those Frankenpeppers still to be grown, the chiltepin comes by its heat naturally.

Raised in Patagonia, Native Seeds retail manager Chad Borseth endured a coming-of-age moment unique to the U.S.-Mexico borderlands. “Chiltepin has kind of always been in my life,” Borseth says. “My first experience was in first or second grade, and almost everyone I grew up with and went to school with had the same experience. One way or another, someone had tricked them into trying a chiltepin, saying that it was a sweet berry.

“A kid would come over with a handful that they had picked off a bush and say, ‘Here, try this.’ Once you got suckered in and suffered through that, you would jump on the bandwagon and get other kids to try it. That was the game. So you get used to chiltepins pretty quickly growing up in Southern Arizona.”

Borseth recalls going over the border at Nogales and seeing people selling 2-liter bottles of chiltepins by the side of the road. Chiltepins grew in the washes around Patagonia, and the parents and grandparents would grind the dried chiles and put the flakes into soups, although the kids steered clear of them. But as Borseth got older, chiltepins gradually worked their way into his daily food routine, too. Now, he’s starting the Sky Island Spice Co., which will produce a mesquite-smoked chiltepin.

Borseth found his inspiration in the chiltepin’s close relationship with mesquite trees. Chiltepins often take root beneath mesquites, benefiting from a touch of shade during summer and thermal protection in winter. The latter reduces the danger of frost, the most significant threat to the plant. Birds perch in the mesquites and feed off the chiles, then spread the chiltepin seeds over a wider area.

Unlike mammals, which are vulnerable to the chiles’ intensity, the birds lack the necessary taste receptors. Instead of serving as a warning, the ripe fruit’s crimson hue signals to mockingbirds and thrashers, among other species, that the chiltepins are ready to eat. And eat the birds will, sometimes gorging themselves. Hard shells allow the seeds to pass through the birds mostly intact. And with poop come peppers.

CHILTEPINES HAVE LONG PLAYED a role in the lives of desert dwellers. The name “Tumacacori” is believed by some to derive from a word in an ancient Tohono O’odham dialect meaning “place where the wild chiles grow.” For much of the year, chiltepin bushes, partly concealed beneath mesquites and hackberries, blend anonymously into the landscape. With well-timed and sufficient monsoon rains, the fruit ripens, typically in September and October. Then a rite of fall begins as Tohono O’odhams and other Sonoran Desert residents on both sides of the border go out to gather chiltepins.

Chiltepins are challenging to cultivate as a commercial crop, so virtually all of them are wild-harvested for sale by gatherers known as chiltepineros. Borseth says that by weight, chiltepins are currently the fourth-priciest spice in the world. Many people harvest them for family and friends because, in addition to culinary uses, chiltepins offer medicinal benefits. A couple of the tiny chiltepins have roughly the same amount of vitamin C as a typical orange. They’re turned into salves for topical pain relief, and their antibacterial properties can help with digestion and stomach problems.

When Tucson earned recognition as the country’s first UNESCO City of Gastronomy in 2015, the designation brought new attention to chiltepins and other desert foods. Dahl and I have lunch at Sixth Avenue’s Exo Roast Co., where a faded painted advertisement for a long-lost business called the Market Inn covers one of the brick walls.

We both order the chiltepin cold brew coffee. Fatty acids from truffle chocolate and cream tamp down the heat of the peppers, which still assert themselves with a lingering warmth that plays beautifully off the coffee’s chill. “I usually just drink black coffee,” Dahl says. “I never have coffee with milk. But these? These make me very happy.”

He introduces me to Exo manager Amy Smith. The Oregon native looks a bit like another Amy — actor Amy Adams — and she explains that the chiltepin cold brew symbolizes the roaster’s commitment to Sonoran foods.

“When we first opened, we wanted to do some drinks that were regionally unique, and chile peppers came up immediately,” Smith says. “And flavor-wise, chiltepins are a really appealing pepper to drink because it has quick heat that diminishes. A jalapeño coffee would stay on your palate too long. The acid is just too much. But the profile of the chiltepin works really well. It’s especially popular in summer, because it actually cools you down.”

For every 5 gallons of coffee, about 50 grams of chiltepins are added, and the crushed peppers soak in the cold brew for 24 hours. The café buys about 50 pounds of chiltepins per year. They’re sourced from a few places in Sonora and cost \$60 to \$75 per pound. Exo also gets chiles harvested by ranchers in the Northern Jaguar Reserve, the preserve created to protect the northernmost population of the cats.

After lunch, Dahl drives us to a friend’s house. Despite its location in the middle of Tucson, the community still feels con-

nected to the desert, with narrow lanes running past stands of mesquites, thickets of prickly pears and agaves growing on dusty lots.

Dahl wants to give me some quality time with chiltepins, so we’re going to play chiltepinero and harvest ripe chiles ourselves. It’s Dahl’s Tom Sawyer moment: He crafts glass ornaments that he fills with dried chiltepins, then donates to Native Seeds for the organization to sell over the holidays. And I’m helping him gather the chiles he needs to make them.

Although Tucson is north of the chiltepin’s natural range, the plants do quite well when planted in gardens. Given a microclimate with a south-facing wall or large boulder to put



off a little extra heat, plus a source of water, they can thrive. The birds do the rest, and the plants quickly spread. They grow fast, too: A chiltepin seedling planted in spring will produce chiles by fall.

We settle within the dappled sunlight scattered by a mesquite and begin gathering chiles. A Gila woodpecker calls from a nearby yard, and wearing a pair of surgical gloves for protection (Dahl goes barehanded), I get to work picking the chiles, one by one. Some are nearly round, others more oval in shape. Most point upward above the leaves, as if imploring the sun for warmth, while a few dangle, pendant-like, from the shrub. It’s meditative work. I leave the dried chiles and unripe green fruits on the bush, but I also never manage to finish collecting all the red ones from any single plant. As we get ready to leave, I notice Dahl has harvested twice as many as I’ve gathered.

A FEW DAYS LATER, I head over to Mercado San Agustín, west of downtown, to talk with Gloria and Huemac Badilla. The Badillas operate Chilttepica, a company that prepares a chiltepin-based salsa and packages dried chiltepins. They’ve brought a box of pan dulce, and Huemac comes back to our table with cups of Mexican hot chocolate. We’re sitting right by the mercado’s commercial kitchen, where the couple first made their salsa.

Huemac grew up in Caborca, Sonora, and chiltepins were always part of his household. “In my house, always in the middle of the table, there was something like this,” he says as he takes out a traditional wooden grinder shaped more like a jalapeño than a chiltepin. “My father, on his scrambled eggs, he’d put on at least eight. Just to start the morning and wake up. Every day. When you move, you learn that not everybody grew up like that.”

One New Year’s Day, around the time the economic crisis hit about 10 years ago, the Badillas looked ahead and wondered what they would do if they lost their jobs. Gloria, whose family left Los Mochis, Sinaloa, when she was 15, worked in accounting while Huemac drove for Anheuser-Busch. “We thought, *Oh, we’ll make salsa and sell it.*,” Gloria recalls. “Because usually, for any gatherings, people would say, ‘You guys are in charge of the salsa.’ That was our thing. It’s Huemac’s family’s recipe.”

Chilttepica slowly emerged from that conversation, and its roster of products has expanded to include chiltepin sea salts and a chorizo that incorporates the chiles. Huemac didn’t want to make the chorizo. His father worked in a meat market, and when Huemac was in high school, he was put in charge of the chorizo: “I would go to school in Caborca and smell like garlic. Seventeen years old and smelling like garlic? That is not good.”

There were setbacks and challenges. Gloria, energetic and upbeat and not one to take no for an answer (or no answer at all), staked out the health department as the couple tried to get the necessary permits. “I went there about 10 days in a row after work,” she says. “I noticed they were giving me the runaround, basically. After a while, the receptionist would tell Karen, the woman I needed to talk to, that her 4:30 standing appointment was here. I showed up until my file got pulled. But we became really good friends with Karen. Afterwards. Afterwards.”

The year the couple started their business, a freeze struck Huemac’s uncle’s ranch, destroying their source of chiltepins. Their friends thought the Badillas were crazy. But the couple persevered and eventually found a dependable, high-quality source of chiltepins from a grower who raises about 6,000 plants in a wild, but controlled environment on a farm about two hours east of Hermosillo, Sonora’s capital.

The success of Chilttepica, like Exo’s coffee and the chiltepin-infused beers made by a few Arizona craft brewers, represents a growing awareness of Arizona’s native chile beyond its traditional Mexican community. “Most of the nanas and *tias* and moms will still make salsa at home,” Gloria says. “You cannot compete with that; it will always be their family’s favorite. But now we’re selling in Costco and feel very blessed for the opportunity that very few people get. We’re immigrants to this country. And this is our American dream.” **AH**

PRAIRIE GHOSTS

Pronghorns are North America's fastest land animal and the second-fastest land animal in the world. When spooked, they'll disappear in a flash — thus the nickname. Unfortunately, a more permanent disappearance threatens their survival. **BY MATT JAFFE • PHOTOGRAPHS BY BRUCE D. TAUBERT**

THEY WERE DYING. One by one, the last Sonoran pronghorns in the United States were succumbing to a devastating drought that desiccated Southwestern Arizona in the summer of 2002.

A distinct subspecies genetically and geographically, the population of Sonoran pronghorns was in full collapse — not just fawns and the older, weaker members of the herd, but healthy adults in their prime, animals strong and well adapted to the cycle of hard times in the desert. Only 21 Sonoran pronghorns survived.

For more than 30 years, John Hervert, wildlife program manager with the Arizona

A Sonoran pronghorn doe eyes its photographer near the Southern Arizona town of Ajo. There are roughly 800,000 pronghorns in North America, but Sonoran pronghorns make up only 1,100 of that total.

Game and Fish Department in Yuma, has studied Sonoran pronghorns, which have been on the endangered species list since 1967. Through the 1990s, Hervert watched as the number of animals declined, especially during a drought between June 1995 and August 1997. But 2002 was something else entirely.

“It was a historic drought,” Hervert says. “Climatologists say it was comparable to a drought that Arizona experienced 1,400 years ago. Widespread and long-lasting. So these animals basically starved to death. We were able to document that because we were monitoring them with radio collars and frequent flights. It was a very agonizing time, because we could see that this population was going to go extinct. And there was very little we could do about it.”

While bison are a national icon, Sonoran pronghorns are part of an even more purely American family of animals. Classified in the family *Antilocapridae*, they're one of five pronghorn subspecies, all of which, unlike bison, live exclusively in North America. Pronghorns resemble and are colloquially referred to as antelopes, and the animals depicted on the famous Antelope House petroglyph panel in Canyon de Chelly are actually pronghorns. But they're most closely related to giraffes.

Sonoran pronghorns are uniquely adapted for their arid environment in Arizona's Lower Colorado River Valley and upland areas of the Sonoran Desert. During periods of good rains, the desert sprouts into a veritable buffet for the herds. Opportunistic eaters, Sonoran pronghorns feed off more than 250 different species of plants, from mesquite beans and ocotillo leaves to highly nutritious forbs such as buckwheat, as well as chain fruit chollas, an important water source.

“They'll eat everything out there, other than creosote,” Hervert says.

Even so, they're shaped by scarcity, not abundance. When the monsoon storms don't arrive, desert plants may survive but drop their greenery, leaving little forage for the animals. So Sonoran pronghorns are smaller and thinner than other pronghorn subspecies. What's most noticeable, Hervert says, is Sonoran pronghorns' much narrower necks, a reflection of the animals' reduced body mass.

It's unknown whether Sonoran pronghorns ever roamed the desert in large numbers, but Hervert says preliminary field investigations have estimated that it takes around 1 million acres to support 80 to 100 of the animals. “That's a very low number for such a large area,” he says. “And in the modern era, the Sonoran pronghorn has always

been rare. Very rare.”

At one time, the population of the different North American pronghorn species reached an estimated 35 million, with a distribution from southern Canada to near present-day Mexico City, and from the Mississippi River to the Pacific Ocean. With the country's westward expansion, hunting, farming and other human activities took a heavy toll. By 1915, only 13,000 pronghorns remained.

Now, the overall pronghorn population is back up to around 800,000. Thanks to the intervention of wildlife agencies and a successful captive breeding program, Sonoran pronghorn populations in Arizona have rebounded from near-extinction. But even including the larger herds in Mexico, they represent a tiny fraction of the total pronghorn population: just 1,100 animals.

ON A BREEZY EARLY-AUTUMN MORNING, I head out from Ajo and into Cabeza Prieta National Wildlife Refuge with Jim Atkinson, wildlife biologist with the U.S. Fish and Wildlife Service. The refuge — together with Barry M. Goldwater Air Force Range, Organ Pipe Cactus National Monument and a block of Bureau of Land Management land — protects the heart of the Sonoran pronghorns' territory in Arizona. Add it all up, and there's more than 2 million acres.

“It takes you pretty much to Interstate 8 and all the way to Yuma,” Atkinson says. “This is a big piece of classic, unfragmented Sonoran Desert landscape.”

Atkinson grew up in Virginia. From an early age, he says, he was “wired for wildlife.” His interest began with whatever showed up in his backyard before he and his brother began ranging farther afield to hunt and fish together. They eventually built a cabin on land the family owned.

“Everyone else was going to games and dances and stuff. We would grab a chain saw and all of the gear and cut wood,” he says. “They all wanted to be the top 0.1 percent [who become] sports stars or rock stars, or be a military guy, or whatever. I quickly realized, *Eh, I don't have any aptitude for all of that other stuff*. So it's this. This is how it's always been for me.”

During his more than 30 years of wildlife work, Atkinson has focused on birds, fisheries, white-tailed deer and black bears. The opportunity in 2008 to come to Arizona and join the Sonoran pronghorn effort was a departure after his decades in Washington state and Virginia.

But he loves it here. “Columnar cacti? Southern Arizona is it,” he says. “Ironwood and paloverde. The uniqueness of the landscape. And the unique-

ness of the animals: Gila monsters, rosy boas and all of the desert birds. It's so different than everywhere else. From a biologist's perspective, that's pretty exciting. To get a chance to be in a place that's totally new [and] that's radically different from what I grew up with. For me, the Sonoran Desert was like going to another planet. It's a landscape by Dr. Seuss."

Atkinson eases the truck down the rough road, bound for the 1-square-mile breeding pen for Sonoran pronghorns. Bouncing along, it's steady but slow going, and Atkinson brings me up to speed on the animals' recovery.

If not for the return of rains in September 2002, the 21 surviving Sonoran pronghorns in Arizona would have perished. After nearly losing these last few animals, wildlife officials realized a largely hands-off approach — and the assumption that, given enough land, the subspecies would endure — needed to be reconsidered.

Atkinson says a decision was made to try to "put a floor under" the Arizona population to prevent another crisis. The first captive breeding pen began operations in 2003, and a system of water catchments was established across the desert. But the recovery effort faced inherent challenges. Because bearing and raising young is so energy-intensive, Sonoran pronghorns give birth only once every other year. And the mortality rate is high.

"Fawn crops come and go. Some years, they die; some years, they do real well," Atkinson says. "But it's that core group of adults. If we have a poor year and all the fawns die, we still want to have a breeding population."

With herds in Arizona and Sonora, Mexico, Sonoran pronghorns are an animal of the borderlands. They share their habitat with migrants and drug smugglers cutting across the desert, as well as with the members of U.S. law enforcement, including border and customs agents, charged with stopping the human flow.

We cross a wash where a tattered blue flag marks a large water tank — part of a network of aid stations established to reduce the number of deaths, especially during summer months. Black 1-gallon jugs, evidence that people have passed through, are scattered in the wash.

For Atkinson, the cross-border traffic adds a dimension to his wildlife work. His encounters have been minimal — mostly chance meetings with desperate, thirsty people who decided to turn themselves in. He acknowledges that there are "some pretty hardcore dudes packing serious weapons," but he doesn't carry a gun, because he's not in a law enforcement role. Although he's not especially afraid, Atkinson makes a point to stay in the open and close to his truck: "I keep my head on a swivel."

He adds, "We've probably been under surveillance of some sort since we left town. There are always people up in these hills, watching. They know what you're doing, and they're communicating with each other. They're not trying to get you. They're trying to avoid detection."

AFTER ABOUT 40 MINUTES, we reach the pen. While three wild herds live in Arizona, wildlife agencies maintain this large

enclosure as part of their breeding program, which is designed to stabilize the Arizona population, meet recovery goals and provide animals that can be sent to Mexico to promote genetic diversity. It's one of two in the state: A second breeding pen was established in 2011 at Kofa National Wildlife Refuge, northeast of Yuma.

The 80 Sonoran pronghorns in the pen live a largely natural existence. They forage off the land but receive supplemental water and food as needed. A double electric fence — capable of delivering 7,000-volt jolts to keep out mountain lions, coyotes and bobcats — surrounds what Atkinson dubs "a mini-*Jurassic Park* enclosure."

We climb a short trail to a viewing station — basically, a pair of folding chairs inside an enclosure covered by shade cloth. The Growler Mountains rise in the distance, and Atkinson quickly picks out a few animals moving along a wash near saguaros and mesquites. They're difficult to see. Lighter in color than other pronghorn species, these animals easily blend into the tawny terrain. Soon, we're able to pick out 15 to 20 of the pronghorns moving in a loose, single-file line before bedding down for the morning in the shade.

I'm surprised by how calm the animals have remained. Hervert had mentioned that aircraft flying at 1,000 feet can scare herds, and Atkinson says the animals are always alert, with eyes and ears that poke out above the scrub like a submarine's periscope. Sonoran pronghorns can spot movement from distances of up to 7 miles. And when they spook, they and the other subspecies earn their nickname: "prairie ghosts."

Pronghorns are North America's fastest land animal and the second-fastest in the world, behind only cheetahs. Their speed likely is an evolutionary response to a Murderers' Row of decidedly fantastic beasts that once roamed the continent, including packs of hyenas, dire wolves, huge lions 25 percent bigger than today's African lions, and especially the now-extinct American cheetahs.

These primordial cheetahs, like their present-day African relatives, could outrun a pronghorn in a sprint of several hundred yards. But pronghorns can reach almost 60 mph for a short distance, then settle into a steady pace of 45 mph for several miles — by which point they would have left cheetahs, and any of those other predators, literally in the dust.

Sonoran pronghorns have no fixed territory. Because monsoon rains can be highly localized, the animals often need to reach areas with recent moisture and fresh vegetation. They range freely, covering 15 miles on some days and exploring more than 1,000 square miles in a year.

While the government lands in Arizona seem expansive, Sonoran pronghorns are cut off from parts of their historical range, much of which has been altered. They once depended on the Gila River and Mexico's Rio Sonoyta, but, as Hervert told me: "Those rivers are largely gone now, and the animals exist in a very fragmented landscape."

Reluctant to cross roads, they're hemmed in by I-8 to the north. In stretches where there's only a vehicle barrier along the border, Sonoran pronghorns can crawl underneath — as athletic as they are, they don't like to jump. How a proposed

border wall could affect their movement is hard to know until a specific design is chosen. But once across the border, the animals almost immediately face Mexico's Highway 2, which cuts them off from two separate herds in Sonora: at El Pinacate and Gran Desierto de Altar Biosphere Reserve, and in the Quitovac area.

It takes a rare animal to surmount these obstacles. Atkinson tells a story about five bucks that were collared and released. One ended up on the Air Force range and survived. Four went north, toward Gila Bend, where three drowned in a canal. A lone survivor continued west.

Trackers lost him for around eight months, until a surveillance flight over the Pinacate spotted a collared animal. The crew downloaded the collar's information, and a map showed



A Sonoran pronghorn buck displays its namesake horns near Ajo. Often incorrectly called antelopes, pronghorns are more closely related to the giraffes and okapis of Africa.

the animal had covered more than 100 miles, including several crossings of Highway 2 in Mexico, before he at last found the Pinacate herd.

"That's the most extreme case we've documented of long-range movement by an individual who had nobody to join up with and couldn't find a herd," Atkinson says. "And he lucked into a herd because he finally happened to go in the right direction. Otherwise, he could have wandered off into never-never land. He probably wouldn't have made it. A lone pronghorn is vulnerable. They need all of those other eyes and ears in the herd."

EACH DECEMBER, wildlife officials, biologists and veterinarians convene at a trio of connected *bomas*, an African name for live-stock enclosures. These circular corral traps in the breeding pen are used to hold the Sonoran pronghorns so select animals can be captured and taken to other locations.

Atkinson explains how the animals are slowly conditioned, over a couple of months, to enter and feel safe in the enclosures. The food is moved deeper and deeper into the *bomas*, which are 50 feet across and 12 feet tall. Shade cloth covers the sides, and after a while, the animals relax in the corrals.

On the day of the roundup, a remote-controlled gate is triggered and closes behind the pronghorns. Atkinson points out the tower where he waits. "You have 40 animals, within 100 yards of you, that have the best eyesight and some of the best hearing out on the desert," he says. "And you can't do anything that's going to get their attention. One little foot shuffle. You blink wrong. Because they'll panic, and you'll see the white hair on their rump flare like a signal. And they're gone."

The goal is to pick out the best animals for release — usually 2-year-olds that are robust and most likely to survive on their own. After being netted, the animals are tagged and receive vaccinations, as well as a mild sedative to reduce stress. Atkinson likens the process to an assembly line that moves the animals from the corral traps to air-conditioned trailers for transport.

"There's a lot of kinetic energy when you've got three pronghorns in a capture cell and 15 people in there, all bouncing around together," he says. "Had broken noses, bad bruises and cuts. We've had dead pronghorns because they collided with each other. It's always an uncertain outcome. But we've had years when we've handled 100 pronghorns with no problems at all. We've gotten really good at what we do."

The stakes are high. So is the satisfaction. For Atkinson, Sonoran pronghorns gave him the chance to get beyond doing inventorying and monitoring — a chance to have a direct, measurable impact on the long-term survival of a creature on the brink.

"We get people coming into the office who have been out on this road, saying, 'You know, we saw eight of those pronghorns. Right off the side of the road,'" he says. "You could see that light on their faces. Like they've seen something pretty spectacular. And they have."

When I speak with Hervert, he's briefly back on the ground between aerial surveys of desert bighorn sheep in the Kofa Mountains. Hervert grew up in Tucson but admits he'd never heard of Sonoran pronghorns until moving to Yuma. Nobody talked about them. Little was known.

Saving Sonoran pronghorns has benefits, both for the public and for future scientists who will study them with an array of tools that currently don't exist. But there's more to the pronghorns' survival than that. "It's a deep philosophical question," Hervert says. "I just don't think we've done our job very well if we see the extinction of a species. Especially when we have the opportunity to make such a difference."

EDITOR'S NOTE: Since the reporting of this story, Jim Atkinson has retired from the U.S. Fish and Wildlife Service. [AH](#)

ESTHER HENDERSON & CHUCK ABBOTT

BY MATT JAFFE

THIS IS THE STORY OF THE DANCER AND THE COWBOY — a romance for the ages, set against the widescreen splendor of an untamed Arizona.

In a word, photographer Esther Henderson was plucky — good at pretty much anything she set out to do. But no single word could capture the character of her husband, Chuck Abbott, a man who spent his first 48 years seeking opportunity, from Hawaii to war-torn Europe, before finally finding the love of his life one day in Tucson.

They would go on to become the first couple of Arizona photography, traveling for weeks at a time on rugged, rutted roads, from stands of aspens in the San Francisco Peaks to expanses of sand verbenas in the desert dunes along the Colorado River. They were forever in search of that ephemeral moment when light could transform land into art.

“We took everything, every season, under every lighting condition, every direction, north, south, east and west,” Esther said.

In the parlance of romantic comedies, theirs was a “meet-cute,” that moment when a couple-to-be first encounter each other in an implausible or amusing manner. Not that Esther was in a laughing mood when Chuck first came calling.

She stood just 5 feet, 2 inches tall. Weighed barely a nickel over 100 pounds. But Esther could be plenty tough. And she wasn’t at all pleased when Tucson businessman Roy Drachman hired Abbott, an outsider from Palm Springs, to photograph for the Tucson Sunshine Climate Club, a booster organization.

Drachman had insisted to Esther that any work related to the club needed to be done locally. Now he had imported a photographer. From California, of all places. “She called on me and raised the devil about

RIGHT: “To Miss Esther Henderson of Tucson are we again indebted for our Christmas cover,” Editor Raymond Carlson wrote in the December 1940 issue of *Arizona Highways*. “It was she, you will remember, who supplied the color study from which our cover of Christmas, 1939, was made ... San Xavier Mission. The subject of our cover this month is [the] San Francisco Peaks.”

OPPOSITE PAGE: Esther Henderson once joked that after meeting her future husband, Chuck Abbott, she decided that “it might be pretty nice to have a man carry the equipment and drive the car.”



“My wife once said to me that photography consisted of fifty percent Providence, fifty percent good equipment, fifty percent leg work and two percent brains.

I replied that you could only have one hundred percent in a whole. ‘That’s what I mean,’ she said. ‘It takes more than the most to get a good picture.’”

— CHUCK ABBOTT



my having hired Chuck Abbott,” Drachman recalled years later, in his memoir.

Weary of the controversy, he thought it might help if Chuck spoke with Esther to try to smooth things over, adding, “She’s a nice girl. She’s all alone.”

BORN IN 1911, Esther grew up in Oak Park, Illinois, the stately Chicago suburb where Frank Lloyd Wright spent the early part of his career and Ernest Hemingway came of age. A self-made man who left school when he was just 9, her inventor father, Robert Carl Henderson, worked as an executive

at a major printing press company. After his wife’s death, he retired and helped Esther with her budding dance career.

Once she finished high school, they moved to New York City, where Esther was discovered by Gus Edwards, a vaudeville producer who also had discovered Groucho Marx, among others. Famous in his day, Edwards was enshrined in the Songwriters Hall of Fame for such hits as *By the Light of the Silvery Moon*, and Bing Crosby played a fictionalized version of him in the 1939 musical *The Star Maker*.

Edwards didn’t exactly make Esther a star, but she earned a good living at the height of the Great Depression by working in

cabarets at upscale hotels and supper clubs, performing what she described as “toe dancing and ballet” and called “very flashy.” She loved the life but had vowed to her father that she would find a new career by the time she turned 25. With that deadline looming, she looked in the Yellow Pages for inspiration and saw the listings for photographers.

“When I came to photography,” she said, “I thought, *Well, that deals with line and light, and that’s something that I know something about, because that’s what dancing is, you might say.*”

Dipping into her savings, a grand total of \$239 after seven years onstage, Esther enrolled in an intensive, three-month



FAR LEFT: Esther titled this photo from the Tucson area *Moody Afternoon*, and it appeared in our January 1953 issue. “Autumn has passed and spring is yet to come,” Esther wrote. “The hand of winter holds the season in a state of suspended animation.”

LEFT: Chuck’s photograph of a young boy fishing in a mountain stream graced our June 1945 cover. “Chuck Abbott has truly caught the Spirit of Young America in this delightful scene,” Editor Bert Campbell wrote.

“Some of the most enchanting effects are seen before ten and after four. Exposure is more of a hazard but the gamble is worth it. Mornings are blue, evenings are red, and I see no reason for not capturing, if possible, those effects which to me are the most exciting.”

— ESTHER HENDERSON

commercial photography and portraiture program the very next day. She set up a darkroom in a hotel bathroom, and her father served as a model for thousands of photographs.

By the time Esther completed the program, both father and daughter were ready for a change. The previous summer, they had vacationed in Minnesota, where he still owned a fishing shack — a true shack, Esther recalled, with no electricity or running water. They savored their time in nature after never having seen any trees, except in Central Park.

Years later, in New York, Henderson looked down from her Times Square hotel room and saw a huge crowd gathered



“That’s the trouble with this picture business — there is so little satisfaction in it! You are always beset with the haunting thought that every picture could be improved, if not by you, then by someone, sometime. So you end up traveling in a circle, periodically returning to do a better, or at least a different, interpretation of the subject. Perfection, of course, is the goal.”

— **CHUCK ABBOTT**

for a concert by Frank Sinatra (“Some punk kid,” her father remarked) at the Paramount Theatre. “And I thought, *I must be crazy, because the world goes on outside and has so much more to do than just what I’m doing*,” she said.

Raised in the flatlands of the Midwest, Esther had always craved easy access to mountains, those caterpillar-like squiggles that first caught her attention as a young girl when she studied the maps in her *Frye’s Complete Geography* atlas.

In 1934, Esther and her father plotted their next move and, following Horace Greeley’s famous adage, decided to go west. There were extended stops, first in Norfolk, Virginia, and then in San Antonio, where Esther worked in a darkroom to gain experience. The roads were horrible, paved entirely with “three-sided stones,” according to Esther. It rained constantly before the Hendersons arrived in Douglas, Arizona, where the sun was shining on New Year’s Eve in 1934. They stayed the night at the landmark Gadsden Hotel before arriving in Tucson on the very first day of 1935.

In Tucson, Henderson checked out the photographic competition before deciding to stay.

They can use a good one, and I’m good, she recalled thinking. “You know, innovative and good. ... To gain experience, I took everybody’s picture — the mailman, the milk delivery man, whoever came to the door in the neighborhood that I knew — just to get experience, so that when I really opened up a business, I wouldn’t fall on my face.”

Esther’s reputation quickly grew. The first year she operated her portrait studio, Raymond Carlson, the now-legendary editor of *Arizona Highways*, stopped in looking for scenic shots as the magazine transitioned from its literal focus on Arizona highways themselves to the places those roads could lead. Esther’s inventory was limited. But she began to shoot more landscapes, and her photos became the first that Carlson bought for the magazine.

Esther worked in the studio during the week, then spent weekends exploring, hauling gear that weighed nearly half as much she did, including her precious 5x7 Deardorff view camera.

“I came to the Southwest as a greenhorn photographer newly



You've Got to Go Back to Get the Good Ones (above), a story and portfolio by Chuck, was published in our September 1955 issue. The story discussed his and Esther's approach to photographing Arizona, and the portfolio included *Cabin in the Snow* (opposite page), a shot of a summer cabin in Oak Creek Canyon in January.

embarking on a studio career,” she wrote in *My Southwest*, a 1968 *Arizona Highways* retrospective of her work. “It didn’t take long to find that I had already made the first mistake: choosing a business that would keep me in a darkroom after I had come to a land of sunlight.”

CHUCK ABBOTT TOOK HIS OWN LONG, bumpy road to Tucson. His peripatetic life began in the Michigan lumber town of Cambro in 1892, but he spent most of his childhood in Portland, Oregon, after coming west by covered wagon as a young boy. Chuck worked for two years on a pineapple plantation in Hawaii before serving during World War I with the Army’s 23rd Engineer Battalion in France and Germany.

Chuck carried a camera with him throughout the war and as he explored Europe after the armistice. He photographed the destruction of the Battle of Verdun, as well as dead German soldiers and such notables as General John J. “Black Jack” Pershing while making pictures of an assortment of historic sites, including the home of Joan of Arc, 12th century churches and Roman baths. He sold sets of war prints in Germany and France and also captured events during the German Revolution of 1918 and ’19 before finally returning to the U.S. in 1921.

In New York, Chuck parlayed income from his war photography into a Fifth Avenue exotic-bird shop he operated with a friend from Germany. Back then, he was no cowboy. Chuck



Portrait of a Storm, Esther's shot of rain at the Grand Canyon, occupied two pages of our December 1951 issue. "A storm in the desert land is a thing of beauty if one can forget one's fear of the storm," Editor Raymond Carlson wrote in an accompanying essay.

"While driving, we often pass parked shutter-clickers who are apparently clicking away at the worst angle under the poorest lighting conditions. They are usually using good equipment and bad judgment."

— ESTHER HENDERSON

married a New York socialite and donned spats and a straw hat while carrying a cane through the streets of Manhattan. The bird shop prospered for a while, but as the economy in Germany collapsed, so did the business.

Chuck took his wife and young daughter to Florida, where he opened Abbott's Joint, a dance hall and casino along the coast. Then, in 1928, the Category 5 Okeechobee hurricane, one of the deadliest natural disasters in U.S. history, destroyed the building — and, with it, Chuck's marriage.

From Florida, Chuck moved to California, where his sister lived, and he owned a coffee and pie shop in Carmel for five years, until famed hotelier Nellie Coffman, owner of the Desert Inn resort in Palm Springs, hired him. In the desert, Chuck led combination horseback rides and barbecues, during which he would cook over open fires and regale hotel guests with songs and tales of the Old West.

He briefly married another socialite, this one from San Francisco, but dedicated more time to photography as his pictures won acclaim during exhibitions at the inn's gallery. The "Cowboy Photographer" was born. And around 1940, Drachman lured Chuck to Tucson.

CHUCK, TALL AND RANGY in his cowboy boots and Stetson, went over to the house and studio that Esther's father had built on a lot thick with caliche on Speedway Boulevard. Late one morning, as Esther worked in the darkroom, her secretary knocked and said Chuck was waiting out front. Esther wouldn't have it: "You tell him I don't want to see him, and this is Christmas rush and I'm busy — no time."

Soon, Esther began to have second thoughts and called Chuck to invite him back. "So, he came over, and when I opened the door and I saw him ... Chuck had white hair very early in life, and was so nice-looking. I thought: *Gee, look at what a nut I was. Wouldn't even talk to him! Wouldn't even see him!*"

“While I am taking a shot, my husband is scouting another. If pressed for time he takes meter readings while I change lenses. We divide up the equipment for portage, and on long hikes that means this individual, at least, is still breathing on reaching the location! My husband carries the film bag, I, the tripod, the oldest boy, the camera, and the littlest, the lunch. Cooperative endeavor, we believe, is more than a system for taking pictures efficiently — it is a good road for all families to travel.”

— ESTHER HENDERSON



CLOCKWISE FROM ABOVE:

Esther's words, sketches and photographs formed *My Southwest*, a piece in the January 1968 issue of *Arizona Highways*.

A determined juniper clings to sandstone in the Navajo Nation's Mystery Valley, as photographed by Esther for our January 1953 issue.

The couple's sons, Carl (standing) and Mark, frequently accompanied Chuck and Esther on their trips around the Southwest. *Arizona Historical Society*

Esther poured highballs, and when she offered to freshen Chuck's drink, he declined. “So, I wasn't able to get him drunk,” she said.

The next weekend, they packed their cameras and a picnic for a day of desert photography. It was the start of a beautiful friendship, creative partnership and romance.

Esther's father had recently died, and Esther was 30, late for a woman to remain single in those days. She was ready for marriage and thought of practical considerations as well, explaining, “It might be pretty nice to have a man carry the equipment and drive the car.” A few months after they met, Esther, no shrinking violet, proposed to Chuck — at 48 a good 18 years her senior.

During a photo trip in the summer of 1941, the couple stopped in Holbrook to get married. A Navajo County justice of the peace performed the ceremony, with two state highway patrol officers serving as witnesses. Esther had packed a gray silk dress for the occasion, but because the couple planned to go back out into the field for more photography after the wedding, she ended up wearing her jeans with a new blue shirt she bought for \$1 at Babbitt Brothers Trading Co. The newlyweds

crossed the street to toast their marriage with chocolate sodas at a drugstore before spending their wedding night camping next to a gravel dump outside Fort Defiance, along the New Mexico border.

If that doesn't sound especially romantic, consider Esther's account, written more than 40 years later: “I still remember the starlight, which I had thought was the figment of an author's imagination. But on that moonless night, far from any city illumination, the billions of stars gave off enough light to see the nearby hills like a black silhouette against a dark blue velvet sky.”

CHUCK MOVED into Esther's house on Speedway, and the couple began building a life together. But when the United States entered World War II, Esther's business went through a transition. More and more families started coming to her studio to have portraits made of sons who would soon go off to war.

Meanwhile, Esther and Chuck had sons of their own: first Carl in 1943, then Mark in 1947. For a time during the war, Esther closed her studio and the couple bought a farm near the ruins of Fort Lowell. In an age before helicopter parenting, they crafted a boat cradle for Carl and anchored it to the bank of a stream while they harvested eggplants, potatoes and tomatoes in their nearby fields.

The couple still took photo trips — that is, when they had enough gasoline during the years of fuel rationing. In 1942, they visited the White Mountain Apache Tribe's land and made some of the most significant photos of their careers. If somewhat idealized, these images captured aspects of the still-traditional life of the tribe: residents constructing *gowas*, or traditional dwellings made of tree limbs; babies carried in cradleboards; and children, alongside a river, pouring water into vessels borne by a donkey. Chuck's photo of billowing clouds over the 700-year-old Kinishba Ruins still appears on the cover of the visitor guide to this National Historic Landmark.

After the war, Esther reopened her studio, and in 1947, the couple launched the Photocenter — a color lab and studio, with



an art gallery dedicated to what they called “Arizoniana” — in a strip of buildings Chuck built along the 2300 block of East Broadway Boulevard. Between a young family and a new business, getting out to shoot became more challenging.

“I found that owning one's own business has its price,” Esther wrote in 1968. “One is never ‘free.’ I found that freedom of the freelance photographer has its price: One is never ‘secure.’ I found the Southwest has its price: a never-ending search to more accurately translate its majesty into human terms.”

Carl and Mark accompanied their parents on trips, and the family worked as a team. The boys helped out where they could, carrying cameras and light gear, as their parents searched for pictures. Behind the wheel of a succession of vehicles, including a classic Ford “woodie” and later a Ford Ranch Wagon with “Chuck Abbott Illustrative Photography” stenciled in script on the door, Chuck handled the driving as Esther directed them to prime locations. Their pictures filled *Arizona Highways*: Esther's shot of a cowboy and his horse gazing down from Maricopa Point graced the cover of a 1954 issue on the Grand Canyon, with Chuck's photo of a rainbow arcing over Zoroaster Temple on the inside front cover. It took four years for Chuck to capture a slope of poppies rising up to meet a ruddy promontory in Cochise County, while Esther turned a pair of tire ruts, filled by recent rains, into a mirror that reflected nearby saguaros and the snow-covered Santa Catalina Mountains in the distance.

Carl, now 76, says, “My mother had the ambition, really. She

“Another concomitance of photography is the reviewing of the files, a costly but necessary diversion, wherein we hope to add more than we subtract. That is, replace old shots with new and better ones. Sometimes we are aghast to see again what we thought at the time represented our best effort.”

— CHUCK ABBOTT

was the go-getter, in a way. My father went along. Especially on the photography side: He would drive, and she would decide where the pictures would be, because she had more of the talent for photography, where his talent was more in business and real estate. He wasn’t particularly artistic, I guess you’d say. The business was what interested him.”

In the 1950s, Esther started writing and photographing *Way Out West With Esther Henderson*, a weekly feature for the *Tucson Citizen*, and the family headed off on extended drives into the American West during the boys’ vacations. It was the Golden Age of road trips — a time before air-conditioned cars, when Arizona was wild, open country.

Esther recalled driving 8 mph up Yarnell Hill toward Prescott on a road she described as “some wayward burro’s reverie.” Carl befriended a Navajo boy named Benny No-Goats at Monument Valley (“I can’t talk Indian and he can’t talk English much, so we don’t have no arguments”), and Esther photographed a storefront, with no store behind it, in a pre-tourism Tombstone. Up in the high country, the Abbotts whipped up their own version of ice cream by mixing vanilla, cream and sugar into snow, and the family camped by streams where the boys fished with crooked poles crafted from branches found in the woods.

Esther rejoiced when, after years of tents and bedrolls, the couple bought a 19-foot, two-toned Aljoa trailer, complete with a bathroom. Long before the advent of digital photography, the family didn’t travel light. Esther wrote: “All our clothes and living materials are in the trailer, which leaves the car free for cameras, two hand cameras, six lenses for the large cameras, 50 plate holders, 1,000 sheets of color film (two bucks a sheet), tripods and flash equipment, two suitcases full of hats and shirts for models, and fishing, tenting, camping and cooking gear for picture props. We never have time to pursue these activities ourselves — we just photograph ourselves and others in the role of vacationers!”

The button-nosed boys — fair-haired, freckled, and clad in cowboy boots and dungarees mended with knee patches — doubled as models for their parents. In one memorable shot, they sit upon a split-log fence, with Mark gazing lovingly up at Carl as the latter puffs out his cheeks to blow the seeds off a dandelion.

Sometimes, Esther turned the newspaper feature over to her sons, whom she asked to keep diaries of their travels. In

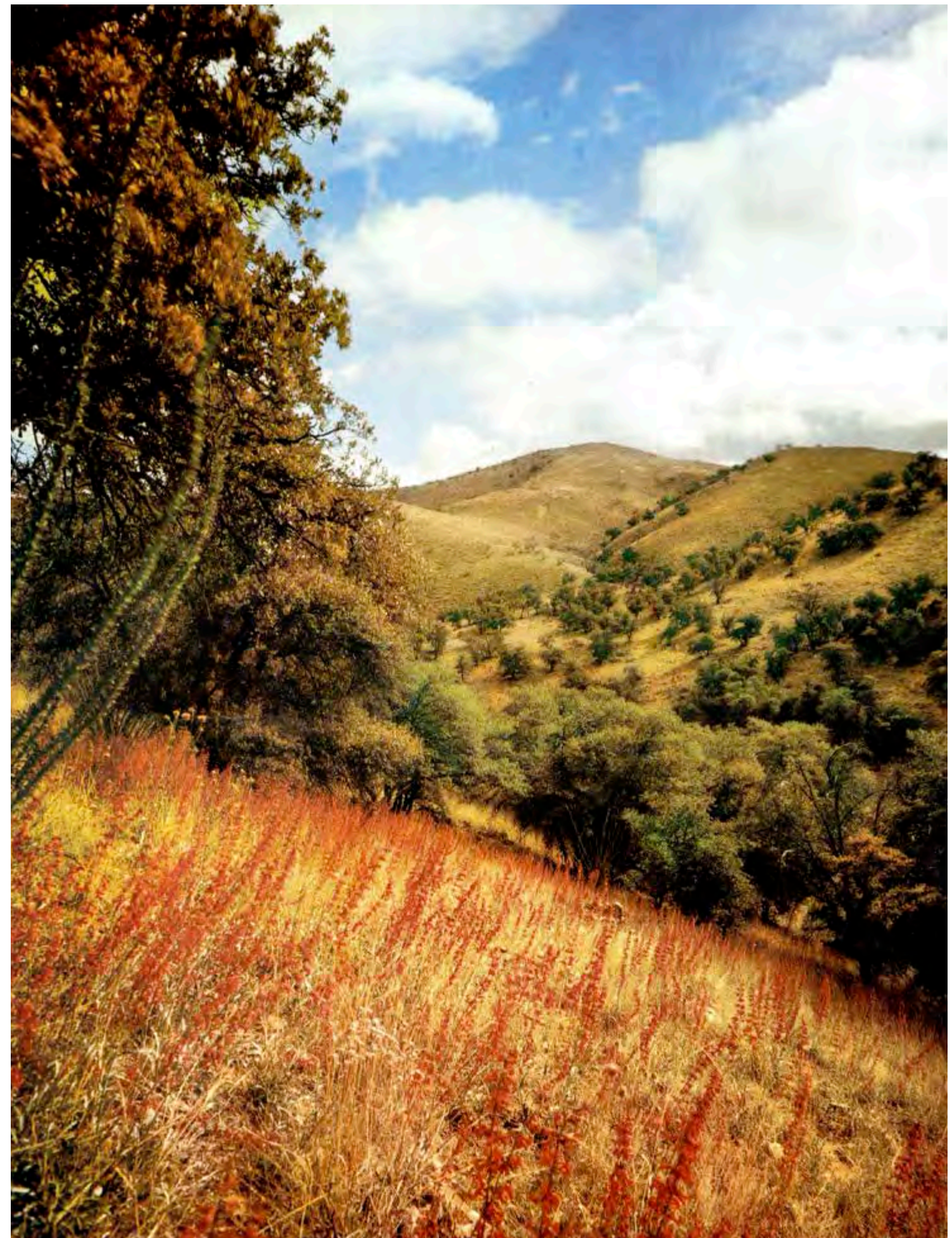


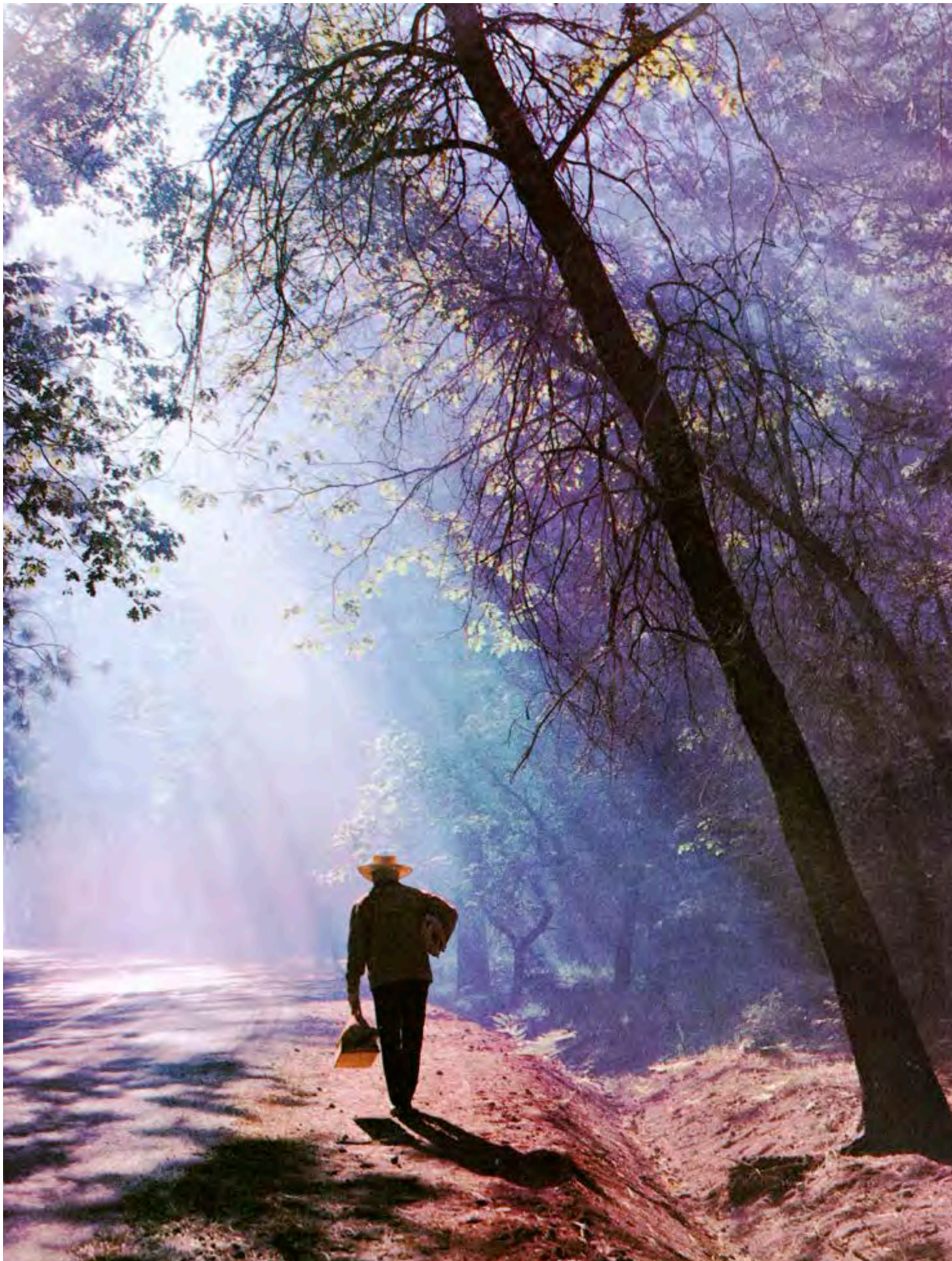
ABOVE: One of Esther’s *Way Out West* columns focused on Chiricahua National Monument, and the accompanying photo likely shows Chuck and the boys at the site. *Arizona Historical Society*

RIGHT: *Dance of the Penstemons*, a Chuck photo that ran in our December 1952 issue, shows a varied landscape near the Southern Arizona ghost town of Ruby.

September 1955, Carl wrote, “We can’t wait to go away, and then, after a couple of months, we can’t hardly wait to get back. But not Mom and Pop. They would never come home — if they could.”

AS MUCH AS THEY LOVED ARIZONA, Esther and Chuck began thinking about a move in the early 1960s. They finally got fed up with the dryness and summer heat. Carl says: “I always liked the desert and wanted them to stay longer in places like Moab [in Utah] and Monument Valley. But they





“My first outdoor assignment took me to Prescott and Oak Creek Canyon. Then, for the first time, I realized how the elevations of Arizona determine the climate and how, within a short distance, they transform the landscape into a completely different scene and season; where the highlands resemble Canadian valleys and the architecture conforms to the climatic demands of the region.”

— ESTHER HENDERSON

would go where there was lots of rain and forest.” The couple once spent 19 days in a Northwest rainforest, trying to get a shot.

Chuck and Esther first bought a ranch in Ouray, Colorado, then moved to Santa Cruz, along California’s Monterey Bay. Chuck had retired by then, and with their money still tied up in the unsold ranch, he told Esther they couldn’t buy a house. Even so, the Abbotts went out with a real estate agent, asking to see “the cheapest, worst place in town,” as Esther described it.

She thought one neighborhood was “a dump” until they went inside a Victorian house with beautiful wooden details. Chuck decided to put in a lowball offer of \$15,000, figuring that the sellers, who were asking \$18,500, would never accept it. “They did take it!” Esther said. “Suddenly, we had a house.”

“They kind of would always bite off more than they could chew on the business side of things,” Carl says. “But they made a success of whatever they jumped into.”

The family settled in Santa Cruz in 1963 and quickly got involved in the community. Chuck renovated the Victorian, and the couple then bought the neighboring house and the one next to that before eventually rehabilitating a line of dilapidated row houses across the street. Victorians had fallen totally out of fashion, but Chuck and Esther felt the style was integral to Santa Cruz’s identity. Mixing metaphors, the local newspaper said of the couple, “They make ‘Cinderellas’ out of ugly ducklings,” and Chuck and Esther would go on to fix up numerous buildings around town, always guided by Chuck’s motto: “Beauty is good business.” He added, “We are great believers in preserving atmosphere in the form of old trees, old buildings and old homes.”

Living in Santa Cruz, Chuck traded his Stetson for a straw hat and became a familiar presence around town. In an attempt to rally the city and merchants to support a downtown improvement plan, Chuck and Esther used their vast inventory of photos of towns and cities around the country in a slideshow that illustrated the potential aesthetic and business benefits of beautification.

Chuck played such an instrumental role in the creation of downtown Santa Cruz’s pedestrian-oriented Pacific Garden Mall that he became known as the “Father of the Mall.” And in 1972, the city established Abbott Square, a downtown plaza where the Abbott Family Band — a bluegrass quartet featuring Carl; his wife, Leslie; and their sons, Luke and Kyle — has performed in recent years.

But another Santa Cruz landmark bearing the Abbott name carries an even deeper meaning for the family. On February 28, 1965, a few days after she and Chuck were honored for their preservation and restoration work, Esther watched as their younger son, Mark, headed out to go bodysurfing. It was a sunny Sunday after the gloom of an extended winter storm.

Mark had come to love the ocean, certainly more than school, and he spent many days fishing from the Santa Cruz Wharf and bodysurfing off Pleasure Point. Chuck said his son had become “one of the top bodysurfers on the California coast.” But Mark drowned that day in heavy surf still churning from the passing storm. “He was an excellent swimmer,” Chuck said, “but old-timers tell me that the undertow here that day was the worst they could remember.”

A month earlier, when Mark turned 18, Esther and Chuck had bought him a life insurance policy, and they used that money to build the Mark Abbott Memorial Lighthouse overlooking Steamer Lane, one of the country’s iconic surf spots. Today, the building houses a surfing museum where Mark’s ashes are interred.

In 1973, Esther would lose Chuck, too. But she lived another 35 years, never wasting a day. She taught Sunday school and volunteered with the Salvation Army and a food bank. She painted, gardened and played jazz piano in a local senior band.

Esther once said she felt like she had lived 10 lifetimes in her 97 years. But looking back, she said, the best times were those days out on the road in Arizona as she and Chuck worked together, forever helping each other in their mutual quest for the next great picture.

“I’m waiting for everything to be perfect,” she recalled, “and Chuck would say, ‘Take it, take it, take it!’” **AH**

“This is Everyman,” Esther wrote of *Into Tomorrow*, a photo published on *Arizona Highways*’ inside back cover in January 1968. “He has embarked on a long journey to an unknown destination; he carries his own burden and he is essentially alone.”

NACO, AZ

Pop. 1,046

BY MATT JAFFE

Photographs Courtesy of Salim Dominguez

LATE AFTERNOON, SOMEWHERE OUTSIDE OF BISBEE: It's too late for the galleries and too early for margaritas, so I ask my wife, Becky, "What about Naco?"

"What about it?" she replies.

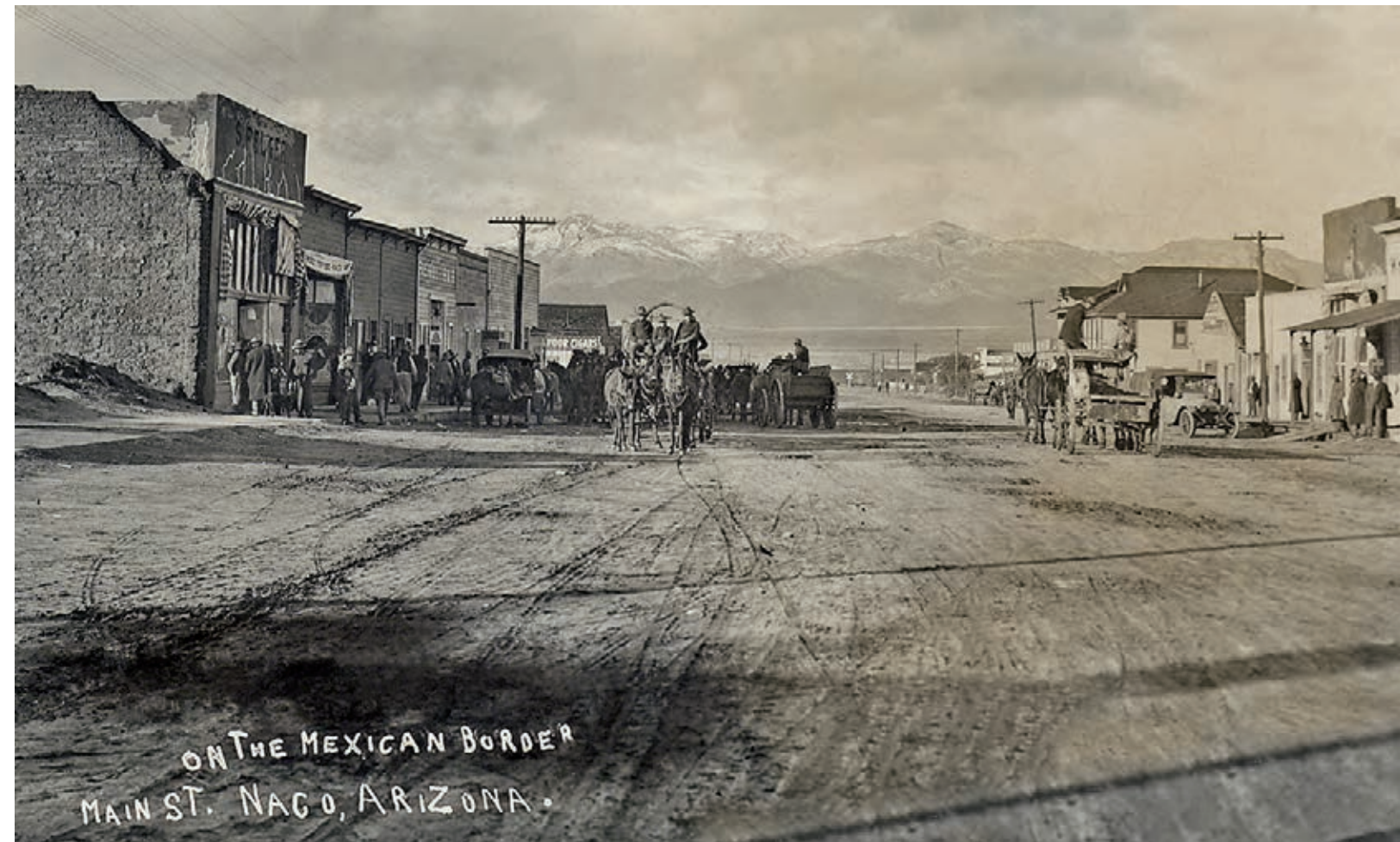
That's a fair question, and one for which I don't have a ready answer. Because I've never been to Naco. More curious than informed, I mumble something about Naco being a border town, and besides, the drive from where we are — near Jimmy's Hot Dog Co. on State Route 92 — might take only another 10 minutes. So, Naco it shall be.

We head south on the Naco Highway. It's a grand designation for a modest two-lane, 45 mph road that runs for all of 6 miles through the desert, with the southern horizon broken by the Sierra San José in Sonora, Mexico. Unless you're continuing into Mexico and the copper mining town of Cananea 30 miles to the southwest, Naco, population around 1,000 on the American side, is the end of the line.

There's no ceremonial entry. Signs announce drivers' imminent arrival in Mexico before the highway rounds a corner and parallels the border fence. We work our way to the center of town and find that if Naco has a faded glory, it's decidedly more faded than glorious.

The town's most impressive building is the Border Patrol station, a 1936 Pueblo Revival structure with protruding vigas and colorful trim that wouldn't look out of place on the Santa Fe Plaza in New Mexico. Along Towner Avenue, the main drag, we walk past side-by-side one-story buildings with false fronts and zigzagging Southwest-style rooflines. One building houses the Gay 90's Bar, which dates to 1931, according to the sign above the ice machine out front.

It doesn't look especially gay, in any sense of the word, and the patrons don't pay us much mind, barely looking up from their beers. It's a bar, like many others, where the pool tables command a place of honor.



Framed arrowhead collections and matching wall plaques of Plains Indians in feathered headdresses hang behind the bar, and I also notice a pair of photographs of a bola-tie-wearing Ronald Reagan and a beaming Nancy Reagan getting into a van. Unremarkable, perhaps, except that they were doing so here, in Naco, and right outside the Gay 90's.

There's something about Naco. I'm just not sure what it is.

BACK IN TUCSON, I tell my sister Debbie about these first impressions of Naco. "Oh, you should talk to our friend Salim," she says. "His family owned the water company in Naco for years."

Salim Dominguez is a retired Border Patrol officer — and a still-active competitive pistol shooter. Tall and fit, Salim has a bare head and speaks in a rich baritone resonant of the frontier, like the heavy in an old Western. He pronounces "Naco" as "Knack-O."

He's also as close to royalty as it gets in Naco. Salim's grand-

Naco's main drag is shown in an undated photo. Once a vibrant border town where residents moved freely between the U.S. and Mexico, Naco today is a shadow of its former self.

father, Sarkis José Dominguez, was known as the "Prince of Naco." A native of Basloukit, Lebanon, Sarkis came to Mexico as a teenager in the 1890s to join his older brother, who owned a dry goods store in Chihuahua. For business purposes, Sarkis took the name José — and, following his brother's lead, changed his last name from Habib to Dominguez. Hence, Salim's own mashed-up moniker.

"Salim" and "Dominguez" don't appear together in nature very often," he says.

A third Habib brother arrived from Lebanon and partnered with Sarkis to operate a Cananea store that later was robbed by none other than Pancho Villa. Sarkis then came to the United States, leasing a Naco property in 1905, and opened a dry

goods store. The town had been established around 1898. A few years later, a spur of the El Paso and Southwestern Railroad’s Benson-to-Douglas line began operating through Naco, connecting to a Mexican railroad that served the massive mines in Cananea, where 7,700 people worked.

Sarkis traveled to San Antonio — for business, Salim assumes — and met Agnes B. Cass, royalty in her own right. Her rancher and merchant grandfather José Antonio Navarro was one of only two Tejanos (Texans of Mexican descent) to sign the Texas Declaration of Independence, which in 1836 established the short-lived Republic of Texas. In 1911, Sarkis and Agnes were married by a justice of the peace in Douglas; a few years later, Sarkis became a naturalized U.S. citizen.

Sarkis gained a reputation for generosity. Salim says he used to leave gold coins at the homes of families with newborns. There are accounts of a traditional Mexican barbecue during which he served 900 pounds of beef to 200 people, and of another event when he had 6,000 oysters brought to the remote desert town.

The Naco in which Sarkis and Agnes settled was a far more happening place than it is today. Separated by the width of a single street, and with residents moving freely between the U.S. and Mexico, Naco was one town in two countries.

“Like all border towns ... Naco was rather wild and woolly with saloons and gambling houses which never closed their doors,” according to one account in the *Douglas Daily International*. But there also were churches and the kinds of businesses — a bank, a drugstore, a hotel and general stores — that any respectable town should have.

Naco emerged as an important port of entry along the Arizona border as trade steadily flowed through: equipment going south to the Cananea mines, and thousands of head of cattle — as well as some of the finest quarter horses in the world — coming north from the ranches of Colonel William C. Greene, who owned more than a million acres in Arizona and Sonora and founded Cananea’s mine.

Sarkis prospered. He ran a mercantile, eventually owned 15 residences in town and served as a customs broker while also operating the Jockey Club Café, a dance hall on the Mexi-

can side with gambling and live music. The Jockey Club, along with other drinking establishments, boomed during Prohibition, and Sarkis took out an ad for the café that proclaimed, “For Fun, Life, Sport and Amusement It’s Naco, America’s Greatest Pleasure Resort.”

He bought a 1921 Cadillac touring car — gray with black trim and all the accessories — and he and Agnes built a home, planting fig, olive and apricot trees in what Salim thinks was his grandfather’s attempt to replicate the compounds he knew from Lebanon.

The Dominguezes entertained businessmen from all over the U.S. and Canada. Tough enough to grab her gun and chase away burglars who had broken into the Dominguez store, Agnes also cooked lavish meals. She made huge tortillas that she rolled up and served on the side; as family lore has it, Agnes came out of the kitchen one night and saw that an out-of-towner had taken the tortilla and tucked it under his chin, like a napkin.

“My granddad didn’t want to embarrass his guest, so he took a tortilla and did the same thing,” Salim says.

Sarkis gained a reputation for generosity. Salim says he used to leave gold coins at the homes of families with newborns. There are accounts of a traditional Mexican barbecue during which he served 900 pounds of beef to 200 people, and of another event when he had 6,000 oysters brought to the remote desert town.

In 1920, after hearing that Army Chief of Staff General John J. Pershing planned to come through town, Sarkis went to Mexico and hired an orchestra to play for the legendary military leader at the Naco train depot. Pershing was so appreciative that he invited Sarkis to ride with him to Douglas.

Describing Sarkis, one article concluded, “He is a student of human nature and he has a philosophy of life that one might build an empire on. ... The ‘Prince of Naco’ believes in America, in the border country and in Mexico as a future source of great wealth and progress. He invests his money into Naco in Arizona and Sonora and waits.”

But on June 1, 1927, after missing the train to Naco while buying gifts for his sons, Sarkis died when the car in which he was riding overturned. The church was too small to accommodate all of the mourners. More than 100 people waited outside for the service to end before the funeral procession, stretching for miles, made its way to Bisbee’s Evergreen Cemetery.

SARKIS’ GRANDEST VISION FOR NACO never came to fruition. The town had been in the running, but Douglas got the smelter that would serve the mines of Bisbee. The repeal of Prohibition cut the flow of visitors to the Mexican side, and the railroad spur was abandoned after new lines began operating through Nogales and Agua Prieta. In 1926, a major fire destroyed much of Naco’s downtown.

After his father’s 1994 death, Salim began cleaning out his dad’s office. “It was basically a time capsule,” he says. “His business records, from the day he started to the day he died, all of his ledgers were in there. And everything the family had that they wanted to store, it all just went in there, too. Every file cabinet — nine, 10, 11 file cabinets full of stuff. Soon as a file cabinet got finished, it went in there.”



TOP TO BOTTOM: Sarkis José Dominguez, flanked here by his brothers Michael (left) and Salim, was known as the “Prince of Naco” and made a major impact on the town.

Sarkis’ mercantile was just one of the Lebanese immigrant’s business ventures.

Clubs such as this one, across the border in Mexico, thrived during Prohibition.

Buried beneath business records from 1966, Salim discovered photographs that his grandmother’s family brought from San Antonio. He also found a collection of his grandfather’s photographs and newspaper clippings.

As I leave the garage workshop where Salim repairs and restores firearms, he hands me an incomparable record of his family’s (and Naco’s) story: a thumb drive filled with scans of the materials he unearthed in the office.

So, I travel into Naco’s past. In one photograph, Agnes and Sarkis stand along a dirt street in front of a stalwart two-story building with four bay windows and an exterior painted with a sign: SARKIS JOSÉ DOMINGUEZ LADIES & GENTS FURNISHINGS, CANANEA & NACO. Much of the building burned down in the 1926 fire, but a section that survived now houses the Gay 90’s.

A color shot shows a small, earth-toned building across the street, with bell-shaped alcoves on a Mission-style facade reminiscent of the Alamo. A tribute to the family’s San Antonio heritage, it housed Salim’s father’s customs brokerage and the Naco Water Co. That building still stands.

From the collection of family friend Fred Valenzuela, there are photos of small-town life: a street scene showing a gas station, a billiards parlor and a meat market; a 1924 image of two men posing stiffly in a telegraph office. But I also find shots of Mexican revolutionary soldiers wearing Pancho Villa-style crossed bandoliers, lined with bullets, across their chests.

Naco wasn’t just a border town. For two decades, it was on the front lines.

INSPIRED BY THE BRUTAL SUPPRESSION of the 1906 mine strike in Cananea, and ignited by attempts to topple dictatorial Mexican President Porfirio Díaz in 1910, the Mexican Revolution lasted for nearly a decade.

The border towns in Sonora turned into combat zones. The U.S. offered access to weapons and somewhere to potentially retreat, and major battles took place at Nogales and at Agua Prieta, across the border from Douglas. During the revolution, border tensions further escalated following the discovery of the Zimmermann Telegram, a 1917 communique proposing an alliance of Germany and Mexico against the U.S.; the note’s discovery helped spur American entry into World War I.

Starting in 1911, a series of battles were fought in Naco, Sonora, although the action often spilled into Arizona. To contain the conflict, the U.S. sent troops to Naco; they included regiments of the Buffalo Soldiers, the famed African-American cavalry units.

Naco was a town besieged. One photo captioned “On the Mexican Border! U.S. Troops Arriving at the Trouble Zone, Naco, Arizona” shows U.S. troops milling about the Naco depot. Other pictures capture artillery units moving into position, with lines of cannons poised on the border, and a quartet of grim-faced soldiers posing in front of a bunker on Christmas Day in 1914.

That photo was made during the Siege of Naco — at 119 days, the longest battle of the Mexican Revolution. No mere skirmish, it was a full-on war, with thousands of Mexican government soldiers deployed in three lines of trenches ringed



TOP: A Dodge touring car was among the casualties when Naco was bombed during the Escobar Rebellion in 1929.

ABOVE: During the 1914-15 Siege of Naco, boardinghouses such as this one were sandbagged to protect inhabitants from stray bullets.

OPPOSITE PAGE: U.S. troops arrive at Naco during one of the periods of unrest along the border.

The hotel in Naco, with its 4-foot-thick adobe walls, earned a reputation as the world's only bulletproof hotel, and pictures show houses barricaded with boards, dirt-filled gas cans and sandbags to protect against stray bullets from the Mexican side.

DESPITE THE SIEGE OF NACO'S significance, if people know only one thing about Naco's military history, it's an incident that took place during a 1929 Mexican conflict known as the Escobar Rebellion.

For a select segment of the borderland population, war meant opportunity. Among the mercenaries was the Yankee Doodle Escadrille, a loose group of pilots hired by both the rebels and the Mexican troops to fly missions. One of these flyers, Patrick Murphy, made history when Naco became the first U.S. municipality bombed from the air by foreign forces.

Salim's father was there that day. In Tom Kuhn's 1994 *Arizona Highways* story recounting the bombing, he said, "I remember going to school, and there were machine guns on each of these sidewalks, on the corners, manned by American soldiers. And I remember that little plane coming over, circling around."

Not a whole lot is known about Murphy. A native of Ireland who had lived in Oklahoma, he apparently had a bad leg. Or maybe just one leg, depending on the account. Murphy, as the story goes, was tipling whiskey in a Bisbee bar when he caught wind of the rebellion. Hired by the revolutionaries, Murphy flew his biplane over the combat zone, with a rebel soldier acting as bombardier. The makeshift explosives consisted of sticks of dynamite packed into suitcases, and the bombardier's aim was equally improvised. Instead of hitting Mexican Army positions, Murphy's bombs struck the Arizona side.

A Dodge touring car, stashed for safekeeping on the U.S. side by a Mexican general, was destroyed, and a couple of buildings were damaged, including the Dominguez family's grocery store, which had windows broken. It could have been much worse: A dispatch from *The New York Times* said one bomb fell in a rail yard where bystanders were watching the action from the roofs of boxcars: "The town was thrown into wild confusion." A handful of minor injuries were reported on the American side.

In reading both Kuhn's story and contemporaneous accounts of the 1929 rebellion, it's clear that Murphy wasn't the only pilot to accidentally strike the U.S. side. But Murphy's story had the stuff of myth: a one-legged (or bad-legged) pilot who not only survives after his plane is shot down but also disappears



forever soon after, escaping prosecution. So, the legend belongs to Murphy, and Arizona's official state balladeer, Dolan Ellis, immortalized the Irishman in the song *The Bombing of Naco*.

THE WEATHERED BUILDINGS in Naco's commercial district scarcely hint at the dramas that played out here or the dreams Sarkis had for the town's future. Salim shipped out for Vietnam in 1968 and only briefly lived in Naco once he returned stateside. He sold the water company, and while he's interested in his family and the town's past, he's less than optimistic about Naco's future.

There's little happening economically. Turquoise Valley Golf Course, established in 1908 and home to "The Rattler" (at 747 yards, billed as the 10th-longest hole in the world), shut down last year. And while some of its buildings have been partly restored, 17-acre Camp Naco, on the edge of town, awaits someone with deep pockets to restore the compound and convert it to new uses. Built as part of a border defense system, the camp is Naco's most prominent surviving landmark.

In the Gay 90's, you'll find a few reminders of Naco's remarkable past. A painting depicts Murphy's biplane, and you can see a binder full of historical photos from Salim's collection. "A lot of history buffs are really surprised and interested," says Leonel Urcadez, a lifelong Naco resident who's owned the bar since 1986. "But some people, you show the pictures to them and they're like, 'Eh.' They don't want to look."

Times have been better for the bar, Urcadez says. A pool league plays here and motorcycle runs make their way down, but it's not like the days when people could more freely cross over from Mexico. "We used to say we had a three-gringo limit," he says.

Urcadez is the guy shaking hands with Reagan in one of the photos. I tell him I had assumed the picture was taken after the president left office, probably in July 1989. That was when an Army helicopter flew Reagan to a hospital in Fort Huachuca after a horse threw him during a visit to a Sonora ranch. But then I had noticed that the picture was dated 1980 in the lower right corner.

Urcadez explains that Reagan was headed to the Cananea-area ranch of Diego Redo, a longtime friend and prominent businessman. Reagan had recently won the Republican nomination for president, and a friend of Urcadez who worked at Fort Huachuca heard that Reagan planned to cross into Mexico at Naco. He told Urcadez, who ended up posing with Reagan on the Mexican side.

The security looked awfully lax for a presidential candidate, especially one traveling into a foreign country. Reagan had only a single bodyguard with him. "Can you imagine that now?" Urcadez asks. "And Reagan got searched at the border just like anyone else. He had a van with a little trailer, a storage trailer, and they searched everything. But, no, it was in 1980. I also saw Reagan [in 1989], the time the horse threw him. I hear they have that horse stuffed down there on the ranch." **AH**

FLYING COLORS

With names such as cerulean dancer, red-tailed pennant and orange-striped threadtail, dragonflies and damselflies are pretty easy to spot, especially in Arizona, which is home to 143 kinds of odonates, about one-third of the species found in the U.S.

BY MATT JAFFE



A female Mexican amberwing (*Perithemis intensa*), a dragonfly species native to the American Southwest and Mexico, clings to a branch.
📷 BRUCE D. TAUBERT

HERE WE ARE, three men standing ankle-deep in the freshets of the Salt River and staring down at a lone damselfly sunning itself atop the rock at our feet. Hundreds, probably thousands, of other dragonflies and damselflies swirl all around as the bulrushes sway with the first gusts of an arriving monsoon storm.

The insects' slender bodies flash scarlet, neon green and cerulean in the sun, and even with the rugged, ruddy profile of the Goldfield Mountains rising to the east beyond the band of vegetation along the river, the boggy setting doesn't feel like it belongs in Arizona. I half-expect to see the baby Moses come floating by any second now.

Pierre Deviche, an Arizona State University professor of environmental physiology and self-taught dragonfly expert, has taken me to this spot as part of a crash course in the world of Arizona's odonates — the scientific name for dragonflies and damselflies, an order of insects that have been flitting about the Earth for more than 300 million years.

"When you look at a dragonfly, it's like looking at a living fossil," Deviche says. "They were one of the first flying insects and were around for 100 million years before the dinosaurs. Haven't changed very much since then."

Odonates debuted during the Carboniferous Period, a time when the planet was hotter and swampier — perfect conditions for dragonflies and damselflies. By that standard, Arizona would seem an unlikely home for 143 kinds of odonates, about one-third of the species found in the U.S. The species' names are as evocative as these insects are colorful: Mayan setwing, Yaqui dancer, desert firetail, cardinal meadowhawk.

The third member of our trio is Tommy DeBardeleben, an accomplished birder and avowed Phoenix Suns fanatic. Chance encounters would seem unlikely while sloshing around in a muddy backwater at high noon on a late-summer day in Arizona. But as Deviche pointed out one odonate after another, he suddenly called out, "Hey, Tommy!" I looked over to see a guy with a hint of actor Luke Wilson about him, dressed in black and carrying a camera and binoculars.

DeBardeleben's website, birdersfrommaricopa.com, details his birding experiences and discoveries around Arizona. His life list of U.S. birds is up to 608 species. But today, he's not looking for birds.

DeBardeleben had noticed an update on Deviche's website, Arizona Dragonflies (azdragonfly.org), that a day earlier, a male Tezpi dancer, a damselfly more typically found in the state's southeast corner, had been spotted here, along the Salt River. So DeBardeleben decided to come out and try to add to the Arizona life list of odonates he started a few years ago.

Deviche and DeBardeleben talk in the kind of verbal shorthand that people with shared expertise and passion can lapse into. They call the dragonflies and damselflies "odes," short for "odonates," and exchange cryptic observations.

"That's a big dancer."

"Yeah, that's a big dancer. It's a cool bug."

"It is."

DeBardeleben goes off in search of the Tezpi dancer as Deviche and I head in the other direction. Then, about 10 minutes later,

DeBardeleben cries out: "I got him!"

Deviche and I walk back over, and there's the Tezpi dancer on the rock. Typical of damselflies, he's smaller than the dragonflies we've seen, slenderer and with wings folded against his body — a key tell when distinguishing the two kinds of odonates.

"This is pretty much where he was yesterday, give or take 20 feet," Deviche says. "I'm so glad you found him."

DeBardeleben grins broadly as he photographs the Tezpi dancer — his 99th Arizona odonate. "I love your website," he tells Deviche. "It's freaking badass. It's just phenomenal."

AS ODES TO "ODES" GO, "badass" is a perfectly fitting tribute to these insects, whose elegantly lethal design manages to be both primordial and futuristic, like some micro mash-up of pteranodons from *Jurassic Park* and X-wing starfighters from *Star Wars*. You get the sense that long after human beings have shuffled off this mortal coil, dragonflies and damselflies will still be zipping around the swamps, doing their thing.


"If they were not so advanced with their biology, they would have been long extinct by now," Deviche says. "The fact that they have been around for so long, and have

changed so little, means that these are really well-adapted animals. And flexible as well. They have been able to adapt and survive all sorts of global events and climatic changes without going extinct."

With four independently operating wings controlled by separate sets of muscles, dragonflies can fly backward as easily as they fly forward. They hover like helicopters and reach speeds of up to 30 mph. Some are also marathoners, using a mix of flying and gliding to migrate thousands of miles while thousands of feet in the sky.

Odonates' vision is even more remarkable. Made up of 30,000 individual facets, compound eyes take up much of



This damselfly is a male canyon rubyspot (*Hetaerina vulnerata*). The species can be spotted along streams and rivers in open-canopy woodlands.  EIRINI PAJAK

Odonates are formidable ambush predators, the Anton Chigurhs of the insect world. Their kill rate of more than 95 percent would shame great white sharks and Bengal tigers alike.

their heads and allow these insects to see virtually 360 degrees around them. Combine that with those flying skills, and odonates are formidable ambush predators, the Anton Chigurhs of the insect world. Their kill rate of more than 95 percent would shame great white sharks and Bengal tigers alike.

Growing up, you had to get past the idea that, despite their rather fearsome appearance, dragonflies weren't going to sting, nor were they venomous. With surprisingly strong jaws, however, the big dragonflies can bite (the order name, *Odonata*, comes from *odonto*, the Greek word for "tooth"). Then again, it would be all your fault, because you would have to actually hold a dragonfly for it to do any damage. Take it from DeBardeleben: "I caught an Apache dancer with my hand. Bit me and I got a little bump. But I never wanted that bump to go away."

The next level of odonate enlightenment came upon discovering that dragonflies and damselflies were good bugs that ate bad bugs, especially mosquitoes — sometimes hundreds per day. The enemy of my enemy is my friend, and for some of us, dragonflies began to inspire curiosity, not fear.

A native of Belgium who studied at Oregon State University and taught at the University of Alaska's Fairbanks campus before coming to ASU as an animal physiologist, Deviche says he had "never paid attention to dragonflies whatsoever. Literally zero." But in 2005, he went birding with a friend from Phoenix who pointed out different dragonflies, and Deviche quickly became hooked. "Odonates seemed like a perfect opportunity to spend time outside, do photography and maybe learn a few new things along the way," he says.

By 2010, he launched his Arizona Dragonflies website, an invaluable resource for anyone looking for information about the state's odonates. "It goes extremely long," DeBardeleben says. "Every single odonate species that's ever been recorded in Arizona is on that website. Pierre puts helpful annotations on pictures pointing to features. You can identify the odonate by this field mark, or look at a certain point on its abdomen and compare it to a species that looks almost identical. He highlights every single identification factor you need to know for every species. He gave people a gift with that website."

The site helps fill gaps in the understanding of Arizona's dragonflies, which Deviche says not many people are studying. He not only records where the odonates range, but also tracks the early and late seasonal dates for observations, which may reveal changing behavioral patterns related to climate change. By comparison, he says, considerably more research of dragonflies and damselflies exists in Europe, where studies show that during the past 10 to 15 years, a growing number of African species have ranged north into Italy and Spain.

But Arizona remains a scientific and geographic frontier when it comes to odonates. "Living in a place like Arizona, we're on the front line of climate change," Deviche says. "We have these species that are affected by global warming, and dragonflies that are essentially Mexican species [and] barely extend into Arizona.

"Well, I think it would be an interesting thing to see, long term, what happens with these animals, right? Are we going to see more Mexican species? That's part of the fun. To just go out and look for these things. But we have very little information of that kind. If you ask me for actual data, we really don't have that much yet."

Mysteries endure. Like the November 2016 sighting of a three-striped dasher near Dudleyville. It was that damselfly's northernmost appearance anywhere in the U.S. and the first time the insect had been observed in Arizona. "That was really surprising," Deviche says. "You have to go 200, 300 miles into Sonora to see one. This is the only one ever found in Arizona. How does a damselfly like that fly over hundreds of miles to end up where we saw it?"

BEFORE HEADING TO THE SALT RIVER, Deviche and I meet at Chandler's Veterans Oasis Park in the southeast corner of metro Phoenix, not far from where the urban finally gives way to farmland and eventually the desert. We're here because of the park's lake, a dependable spot to see multiple odonate species.

Deviche carries a large butterfly net, which draws puzzled looks from the moms pushing their babies around the lake in jogging strollers. He wields the net like a wizard waving a wand, sweeping it through the air to scoop up the dragonflies before flicking his wrist to create a pocket at the end of the net so the insects can't escape.

He doesn't miss often, so I get close-up looks at black saddlebags, red-tailed pennants and roseate skimmers, the latter a dragonfly that Deviche describes as "aggressively territorial."

As Deviche reaches into the net, the dragonflies' rigid wings click like castanets. The wings vary from colorless and transparent to translucent red and amber, but they share a similar structure. Veins divide the membrane into sections, creating an assortment of rectangles, triangles and pentagons. The patterns of the wings remind me of leaded glass, and the dragonflies' faces, with those giant eyes and the prominent mandibles they use to rip apart their prey, are oddly expressive.

We spend a couple of hours just watching odonates be odo-



The male Comanche skimmer (*Libellula comanche*) is known for its white face and blue abdomen. It can be spotted in much of the western United States. **PEGGY COLEMAN**

nates — mating, hunting and chasing away rivals — before driving separately to the Salt River, more than 30 miles to the northeast. Deviche wants to show me a different spot because the species mix varies from location to location, depending on such factors as elevation, fish population and water quality. Some odes, Deviche says, can survive in polluted conditions, while others require much purer water.

The diversity along the river is quite high, with 46 documented species. Even before we reach the water, Deviche spots a white-belted ringtail, a dragonfly with a dramatically striped thorax and a black-and-white-banded abdomen, resting on a fence above a cholla. And with its turquoise eyes and beaded accents along its body, a blue-eyed darter poised along a nearby branch resembles a piece of exquisitely crafted Navajo jewelry.

Deviche says when he first began observing dragonflies, very few people gave them much thought. In the past 10 years, however, more and more people have developed an interest, and there now are a couple of odonate identification apps. Deviche thinks dragonfly watching is where birding was back in the 1980s. "I don't know anyone who has gone from dragonflies to birds," Deviche says. "But I know a lot of people who have gone from birds to dragonflies."

It's no easy avocation, even though odonates are big, as bugs go. The largest insect of all time was a prehistoric dragonfly with a wingspan of 27 inches (about the same as a Cooper's

hawk), and some dragonflies today still have wingspans of nearly 8 inches. But trying to sort out the aerial circus all around me is a bit like a cat trying to catch the beam of a laser pointer. It's always out of reach.

DeBardeleben says after he got burned out on birding — which had "become my life, my obsession" — he decided to give odes a chance. In 2017, he dedicated a few months exclusively to dragonflies, and the hiatus inspired a fresh passion and rejuvenated his fascination with birding.

"I like the challenges that odes bring," he says. "Some are easy to find and identify, but others require searching and luck. It's a whole other world to be interested in. What odes did was open my eyes to a different side of nature. No matter where I go, there's another new ode to see."

Deviche and I say goodbye to DeBardeleben and work our way toward the main channel. Through a break in the reeds, we see a couple drinking beer as they float by on inner tubes.

"Hey, whatcha looking for?" asks the bearded man, sipping from his Coors Light as he points to Deviche's net.

"Dragonflies!" Deviche replies. As if that's the most natural answer in the world.

Some widow skimmers buzz around the inner tubes, and the man's head moves in quick little circles as he follows them for a few seconds. Then he turns back to us and chuckles: "Dragonflies? Oh, I guess you ain't having to look too hard to spot any of those here." **AH**