THE SUPERLATIVES

THE LARGEST, FASTEST, AND RAREST OF ARIZONA BIRDING
ON THE COVER
California Condor, Dorothy Sutherland. Dorothy stands in awe of creation and its beauty beyond comparison. She tries to show a glimpse of it through her photos.

ABOVE: Peregrine Falcon, the fastest flyer in Arizona, and the world! Ned Harris

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TOP OF THE CLASS

When I look at the incredible spectrum of birds in our region, I’m always struck by the diversity in sizes, shapes, colors, and habits. Each filling their own special niche in the environment, our local birds have developed some amazing adaptations. Some species are tiny and some are enormous. Some are built for speeding through the air, while others barely leave the ground.

With this incredible variety, it’s no surprise that we’re fascinated by the extremes. Which is the fastest? Which is the largest? Which ones travel the farthest? This issue of Vermilion Flycatcher looks at the superlatives. It’s like our old High School yearbooks, but instead of “Most Likely to Succeed” and “Class Clown”, we’re sharing the “Fastest Runner” and “Quickest Incubation Period”.

And it’s not just the birds that win top honors. In this issue, you’ll also find superlative birders and birding locations.

This issue was a lot of fun for us to put together, and we hope it will be fun for you to enjoy as well. I hope it inspires you to think about your own superlatives in birding: What was the most fun you’ve had with birds and birding? What was your greatest discovery? Maybe it will even challenge you to consider what the biggest threats are to birds, and what steps you can take to help protect them and their precious habitats in the coming year.

We love to hear from our readers. If you have a superlative of your own to share with us, please message us on our Facebook pages, or email us at INFO@TUCSONAUDUBON.ORG.

Thank you. I wish you happy (and superlative!) birding.

Patti Caldwell,
Interim Executive Director

FROM THE EXECUTIVE DIRECTOR

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One of the great things about birding in Southeast Arizona is that you can find exciting birds year-round and in so many different habitats. After many months of exploring the desert and mountains, new areas and birds beckon in late fall and winter—the Sulphur Springs Valley is one of these locations. From thousands of Sandhill Cranes, to Bald Eagles and Peregrine Falcons, and Mountain Plovers and Chihuahuan Ravens, the easily accessible sites in the valley will entice you to make a trip and find some of Arizona’s superlative winter birds.
WILLCOX: LAKE COCHISE AND TWIN LAKES GOLF COURSE

No matter the time of year, a birding trip to the Sulphur Springs Valley isn’t complete without at least a quick stop at the “Lake.” And of course “quick” is a relative term here as you scan through thousands of ducks and shorebirds looking for the odd Eurasian Wigeon or Hudsonian Godwit. In winter though, the large body of water (for a usually dry valley) is a magnet for wintering ducks, geese, shorebirds, waders, and even gulls. There’s a good road around the lake, allowing you to adjust for the sun and even a couple of blinds to hide behind. Lake Cochise is one of the most reliable spots for Scaled Quail, so be sure to scan the fields surrounding the lake for them as well as for a multitude of sparrows, longspurs, and the Eastern (Lillian’s) Meadowlark, our regional specialty subspecies. Check the nearby ponds on the south side of the golf course for marsh wrens, rail, green herons, and anything else hiding in the cattails. This is the Chihuahuan Desert grasslands in winter—Loggerhead Shrikes, Sage Thrashers, Chihuahuan Ravens, and raptors such as Ferruginous Hawks are possible at any time. This spot is always worth a stop and is probably the best location for waterfowl and shorebirds in the region. Don’t forget to bring a scope if you have one!

WHITEWATER DRAW WILDLIFE AREA

Whitewater Draw is a very popular 1400 acre site secured by Arizona Game and Fish in 1997 to protect the largest Sandhill Crane roost in Arizona. Cranes put Willcox on the birding map and led to the creation of the Wings Over Willcox birding festival, an event that attracts nature lovers from across the US each January. You could find upwards of 30,000 cranes later in winter when numbers peak, as well as thousands of Snow Geese and a few Ross’s Geese. The best times for viewing the crane spectacle are at dawn when they fly out almost all together, or late morning when they return after feeding in the nearby fields. The sights and sounds are breathtaking!

Whitewater is known for cranes but also has many of the other birds the Sulphur Springs Valley is famous for. Bald Eagles could show up anywhere in the Valley, but they seem to favor the wide open water here and the chance to pick off a young or injured crane—watch for a large number of cranes suddenly lifting up in chaos. It’s not all about the water either! Mesquite and willow are present along some of the water edges and can hold House Wren, thrashers, sparrows, and wintering Short-eared and Long-eared Owls. The old hay barn sometimes has a special surprise: a roosting Great Horned Owl.

WINTER RAPTOR TOUR

The Sulphur Springs Valley is primarily agricultural in land use and is criss-crossed by many farm roads. This makes it easy to develop bird tours of all kinds, and the Valley is especially good for getting a diverse list of raptors in winter. A sampler from the peak time of December through March could include Northern Harrier, Sharp-shinned, Cooper’s, Harris’s, Red-tailed, Ferruginous, and Rough-legged Hawks, Bald and Golden Eagles, American Kestrel, and Prairie and Peregrine Falcons. See the details of a suggested route centered around the small town of Elfrida in Tucson Audubon’s book Finding Birds in Southeast Arizona.

While scanning power poles and farm buildings for raptors, you will undoubtedly come across other outstanding birds that utilize agricultural areas and sparsely vegetated lowlands. Recently plowed fields are great places to look for wintering Mountain Plover, the “Prairie Ghost.” This drab North American endemic species breeds on the western Great Plains and often faces away and squats motionless, virtually disappearing in the grass. Another endemic, the Bendire’s Thrasher can be found at various spots in the Valley with very little vegetation and sandy, loose soil. Unlike other southwestern thrashers, this species migrates from the northern part of its range, which can be much more lush than the habitat they prefer in southern Arizona. Other birds to look out for include Sagebrush Sparrow, Sage Thrasher, Chihuahuan Raven, and Mountain Bluebird.

Scaled Quail, Mick Thompson; Sandhill Crane, Hemant Kishan; Ferruginous Hawk, Ned Harris
Arizona’s incredible array of habitats and influences from nearby regions such as the Rocky Mountains and Sierra Madre in Mexico have led to a state list of over 500 bird species. From the low elevation deserts along the Colorado River to the high alpine tundra of the San Francisco Peaks, the range of species is impressive. Here is an introduction to some of Arizona’s superlative birds.

**LARGEST**

The Critically Endangered CALIFORNIA CONDOR is the largest flying land bird in North America with a wingspan of nearly 10 feet and a body length longer than an Andean Condor. In flight, condors rise on air currents to soar as high as 15,000 feet! The population of condors fell to 22 birds in the 1980s, but thanks to a successful captive breeding program there are now about 290 in the wild in California, Arizona, Utah and northeastern Mexico. The best places to spot them in Arizona are the South Rim of the Grand Canyon and Navajo Bridge near Page, AZ.

Matt Griffiths
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SMALLEST
The CALLIOPE HUMMINGBIRD is the smallest bird in North America at about 3.25 inches long and weighing 0.1 ounces with a wingspan of a little over 4 inches. It can be found in Southeast Arizona during its migration between southern Mexico and the montane western US in spring but more often in fall. September and October are good times to find them here, usually in our Sky Islands. Calliope Hummingbird is also the smallest long-distance avian migrant in the world, traveling about 5,600 miles annually.

The GOLDEN EAGLE takes the top spot for the fastest active flyer in Arizona, clocking in around 80 mph. Surprisingly, your backyard probably contains another fast flyer—the Mourning Dove cruises at about 40 mph and sprints up to 55 mph! But of course, nothing compares to the fastest animal on earth, the PEREGRINE FALCON. This extraordinarily aerodynamic bird reaches about 250 mph when it tucks into a stoop dive to attack prey. Look for eagles and falcons soaring above rocky cliff faces in all of the mountain ranges of Southeast Arizona.

FASTEST RUNNER
A local favorite, the GREATER ROADRUNNER is the fastest land bird in North America, cruising at 20 mph and sprinting up to about 26 mph. The roadrunner uses this speed combined with short flights to catch all types of prey such as lizards and even hummingbirds from feeders. Amazingly, it’s a slowpoke compared to the 9 foot tall, 200 lb. ostrich, which can sprint about 50 mph! Look for Greater Roadrunners along the Santa Cruz River on the Loop trail.

Greater Roadrunner, Mick Thompson; ABOVE: Calliope Hummingbird, Alan Schmierer; Golden Eagle, Ignacio Ferre Pérez
LONGEST MIGRATIONS

With so many factors involved, there’s not a clear-cut winner here, but there are some incredible migration stories happening in Arizona. Likely the most common long-distance migrant in the state, the SWAINSON’S HAWK travels some 12,000 miles annually between Canada and Argentina in one of the longest migrations for a bird of prey. RED KNOTS and PECTORAL SANDPIPERS, both uncommon in Southeast Arizona during the fall, undertake incredible 18,000 mile journeys, all on wingspans under 20 inches! The true migration champion of the world though is the ARCTIC TERN, last being seen in the Tucson area in May of 2020. These long-lived (34 years or more) birds travel from the top of the planet to the bottom to take advantage of an endless summer, a lifestyle requiring annual trips of roughly 25,000 miles.

MOST COMMON

Using eBird data for all of Arizona, (biased, of course, toward when and where people go birding) MOURNING DOVE comes out on top for most of the year when looking at frequency, abundance, and high and average counts. These numbers hold true for Southeast Arizona as well. The House Finch comes in a close second. Cheers to the Mourning Dove—the only bird to place in three of our categories!

RAREST

Arizona has been host to many rare birds, so how to choose? Tufted Flycatcher has bred in the Huachuca Mountains recently, likely the only pair in the US. The Five-striped Sparrow is the rarest breeding sparrow in the US with a handful of pairs. The Pine Flycatcher found in the Santa Ritas (2016) and the Gray-collared Becard in the Chiricahuas (2009) were both first records for the entire US. Those species might have been expected though, a JUAN FERNANDEZ PETREL being pushed into Tucson with a tropical storm was on no one’s radar! This sighting of a species usually found far off the coast of southern Baja California by Brian Gibbons in 2016 was a continental US first. The event caused quite a stir in the local and national birding scenes and is likely the greatest Arizona yard-bird ever!
FASTEST TO HATCH

The YELLOW-BILLED CUCKOO is one of the last breeding birds to return to Arizona in summer, timing its young to take advantage of the bounty of resources resulting from monsoon rains. It’s here for a short time and has to quickly react to environmental circumstances, and this is likely why it has a short incubation period of only 9 to 11 days. Cuckoos can be found along the Santa Cruz and San Pedro Rivers and also in canyons of oak woodlands. The House Wren comes close with an incubation period of 12 days, while most other birds’ eggs hatch after about two weeks.

FASTEST NEST BUILDER

It probably comes as no surprise that the winner here is again the MOURNING DOVE! Known for their laughably sad constructions, a pair of doves can build their “nest” in a matter of hours. The fact that Mourning Doves are so successful and can raise up to six broods a year shows that nest quality might not be an important variable for survivability rates. Other species that take up to two weeks working on a nest should take note!

MOST RANGE-RESTRICTED TO ARIZONA

The majority of the ABERT’S TOWHEE population resides in this state, from Southeast Arizona to Yuma and up the Colorado River corridor. While it makes small incursions into neighboring states and Mexico, it really could be called the “Arizona Towhee.” One of the last bird species to be described in the US, the RUFOUS-WINGED SPARROW can only be found in Southeast Arizona down to northern Sinaloa, Mexico. Interestingly it was “discovered” in Tucson near Fort Lowell in 1872, seemingly disappeared around 1886, and then was refound again in Tucson in 1936.
Superlatives aren’t just for birds... If you want to go somewhere really special in Southeast Arizona, these five eBird hotspots are all standouts in their own ways!

MOST POPULAR
SWEETWATER WETLANDS
One of the most accessible birding spots in Tucson, Sweetwater Wetlands boasts an impressive array of species to see each time you visit. It’s a favorite site among new bird enthusiasts and newcomers to our region. It’s no surprise, then, that Sweetwater has amassed over 21,700 completed checklists.

FASTEST GROWING
CANOA RANCH
This site, south of Tucson, has quickly become one of the go-to birding locations in our region. In 2017, prior to the lake restoration project, Canoa Ranch was about the 50th most popular hotspot in Pima County. Today, it ranks 2nd in Pima County, and 15th in Arizona! The big reason for that explosive growth in interest? The lake restoration has created multiple new habitat zones, attracting 100 species that had never been recorded at Canoa Ranch before.

HIGHEST SPECIES COUNT
PATAGONIA LAKE STATE PARK
As of this writing, 327 species have been observed at Patagonia Lake State Park all-time, making it the highest count hotspot in all of Southeast Arizona. Almost any bird you’d hope to see in Southeast Arizona has been seen at Patagonia Lake—Painted Buntings, Elegant Trogons, and even Brown Pelicans!
IZONA HOTSPOTS

MOST REMOTE
ARAVAIPA CANYON

A rugged drive northeast of Tucson, Aravaipa Canyon is a haven for anyone looking to get far away from civilization. Paved roads give way to gravel and dirt before you arrive, and from the trailhead you’ll have miles of uneven ground to cover, a flowing stream to cross, and pristine riparian habitat to explore. Because only a few visitor passes are issued for any given day, you can expect your visit to Aravaipa Canyon Wilderness to be in near solitude.

HIGHEST ELEVATION
MT. GRAHAM

The only place in Southeast Arizona where you can climb above 10,000 feet, Mt. Graham wins the award for highest elevation birding location in our region. Mt. Graham hosts several species that are difficult to find in our region, including the Northern Goshawk and Mexican Spotted Owl.

Summer Tanager, Hemant Kishan; Aravaipa Canyon, Bob Wick
Northern Goshawk, Emelie Chen; Mt. Graham, Scott Olmstead
SUPERLATIVE ARIZONA BIRDERS

It’s natural, a state with such superlative birds should produce superlative birders. Arizona is no exception. According to eBird data at press time, a total of 442 species of birds had been seen in Arizona by the combined forces of hundreds of bird watchers. Some of these birders are extremely passionate and have been keeping lists for many years, but not only do they see a lot of birds, they give back to the community by leading people on trips, reviewing for eBird, or lending their skills to bird survey research and documentation.

Let’s meet just a few of Arizona’s superlative birders who lead the flock and generate a lot of important data for eBird that’s used by other birdwatchers and researchers—for the conservation of the birds themselves.

CHECKLISTS: JOHN HIGGINS, PIMA COUNTY ALL-TIME LEADER AND 2021 LEADER; ARIZONA ALL-TIME LEADER AND 2021 LEADER—ALMOST 23,000 TOTAL LISTS!

I have submitted the most eBird checklists in Pima County and Arizona because I believe the information that I submit now will still be used a hundred years from now to protect birds and where they live. I try to report the birds I see almost everywhere everyday.

One of my most memorable checklists was a Tucson Audubon Avra Valley Hawks for Beginners field trip in 2017. It had rained hard the day and night before, and only twelve people showed up, instead of the usual forty. Off we went anyway with our scopes and raptor guides down the muddy dirt roads. Red-tailed Hawks, American Kestrels, Mountain Bluebirds, Lark Buntings and ducks were seen. Our cars and boots were a mess, but we had a good time!

John Higgins is retired Child Abuse Social Worker who has led birding field trips for Tucson Audubon Society, Pima County Natural Resources, Parks and Recreation Department, and Saguaro National Park for thirty five years.

American Kestrel, Martin Molina

PIMA COUNTY 2021: GAVIN BIEBER, 302 SPECIES

Being unsure about how much out-of-state guiding would be coming my way, I thought it might be fun to try a bit of concentrated birding around Arizona the last year and a half. Soon after starting though, I realized just how much driving would be involved in chasing things all over the state. I then restricted the attempt to Pima County; a sprawling county that in reality was a bit too big as well! I’ve particularly enjoyed learning about some new areas closer to Tucson and have spent quite a bit of time exploring the Altar Valley and Arivaca areas and as far west as Ajo (where a long walk out in some quite remote desert near the border revealed an amazingly cooperative pair of LeConte’s Thrashers). I’ve enjoyed the Happy Valley area, Redington Pass, Sonota grasslands, and the especially stunning this year, Box Canyon. Now if I could just find a Montezuma Quail or two before the year is up!

Gavin Bieber is a Senior Leader at WINGS Birding Tours and leads trips for Tucson Audubon.

LeConte’s Thrasher, Alan Schmiere
A foggy December morning in 2011, after a night of cold rain (37 degrees in Tucson), Mark Stevenson and I decided to check various Tucson bodies of water for any unexpected birds. At Kennedy Park, through a lifting fog and waning clouds, I spotted a light-rumped swallow, which I knew didn’t belong in Tucson in December. Cliff Swallows head south by the end of September with only a few remaining into October. Odds were that I was looking at a Cave Swallow.

After viewing every feature and field mark we knew to look for to identify a Cave Swallow, we left the park in search of a pay phone to contact someone with a camera and more experience with Cave Swallows. Yes, in 2011, you could still find a payphone in Tucson. We reached Dave Stejskal, who agreed to come and give us his opinion of the bird. By the time he arrived, the swallow perched nicely on a wire posing for documentation photos. Dave confirmed our suspicion of this bird being a Cave Swallow.

Word quickly went out on this rarity, which stayed for several weeks; and was enjoyed by many birders. It’s always a good feeling when many folks get to share in enjoying a rare bird that you find.

The Canada Jay is a resident in Arizona’s White Mountains, its southernmost range extension. It’s a species we’ve rarely seen in Arizona, and haven’t found for twenty years. After ten trips in July and August of this year, completely unbidden, three jays found us! While walking through the Sunrise Campground at dawn, the birds gracefully floated down on their broad wings, and landed at eye level a few feet away. There’s no need to anthropomorphize these jays. Historically labeled as “stupidly tame,” and “errant thieves,” they are omnivorous, and have been known to eat anything, from soap to tobacco. Because we’ve had considerable close contact with birds while banding, and lived with sentient parrots for years, we’re naturally attracted to these innately curious and trusting jays. As we contentedly admired their soft-looking plumage and alert demeanor, we raised our hands as if offering a treat, and they moved closer. After carefully scrutinizing us, and moving from branch to branch to get a better view, they found us wanting, and flew off. It was a memorable encounter for us!
It can be an unforgettable experience to see our southwestern deserts blanketed with carpets of colorful spring wildflowers. In banner years, both annuals and perennials contribute to the show.

The flowers that produce the most glorious abundant color are the spring annuals. Seeds of annuals are quite particular about their requirements. If the soil is too dry due to scarce and irregular rainfall, they won’t germinate. If the soil is moist enough but the winter is too cold or too warm, they may not germinate at all, or only in very small numbers. The combination of moisture and temperature may be just right for some species, but not for others. On the other hand, some of the showy, short-lived perennials, such as brittlebush, desert marigold, and penstemon are not as picky about the timing of rainfall and temperatures and may bloom in years when the annuals do not perform.

For spring-blooming annuals, mass germination and prolific growth are dependent upon the timing and amount of winter rains. In general, annuals germinate only during a narrow window of opportunity after the summer heat has subsided and before winter cold arrives, sometime between mid-October and early December. What is needed is a gentle soaking rain of about an inch to induce germination and then enough monthly rainfall thereafter to sustain growth. These annuals develop rapidly, bloom, and mature their seeds which lie dormant in the soil during the rest of the year, thereby escaping the season of heat and drought. Seeds may be viable in the soil for a decade or more, just waiting for ideal conditions.

The main purpose of flowers is not to please us, but rather to attract insects, birds, and other visitors that pollinate the flowers. Pollination is the way flowering plants reproduce, and for it to occur, pollen grains from one flower must be carried to another flower of the same type. Since plants are relatively immobile, they require a little help for this to happen. Some plants are wind pollinated, others are self-pollinating, but most need insects or other animals to move pollen from flower to flower. Over millions of years, flowers have evolved shapes, colors, and enticing fragrances—not to appeal to humans, but rather to attract pollinators to ensure their reproductive survival. Bees, butterflies, moths, beetles, hummingbirds, wasps, ants, flies, and bats are all important pollinators. While we delight in the color and beauty of the blooms, it is also rewarding to spend time observing all of these spectacular creatures as they move about from blossom to blossom. So think about sowing seeds this fall in anticipation of a superlative spring wildflower show! Native wildflower seeds are available at the Nature Shop.

**GREAT WILDFLOWER VIEWING SITES:** Catalina State Park, Sabino Canyon Recreation Area, Saguaro National Park East & West, Organ Pipe Cactus National Monument, Picacho Peak State Park

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**FEATURED WILDFLOWERS**

**MEXICAN GOLD POPPY** *(Eschscholzia californica ssp. mexicana)*: Who doesn’t love poppies? In years with good rains, delicate Mexican gold poppies can carpet the landscape, attracting many pollinators.

**DESERT LUPINE** *(Lupinus sparsiflorus)*: A real looker, the purple-blue flowers are stunning when mixed with poppies.

**OWL CLOVER** *(Castilleja exserta)*: In years of abundant rainfall, owl clover makes up the pink/purple component of the “carpets” of color formed by annual wildflowers in the desert.

**BLADDERPOD** *(Lesquerella gordonii)*: Depending on rainfall, the bright yellow flowers of bladderpod may occur in smatterings here and there, or as a whole sea of yellow on the desert floor.
PARRY PENSTEMON (Penstemon parryi): This showy perennial with pink tubular flowers is a magnet for hummingbirds, House Finches, and Verdins.

BRITTLEBUSH (Encelia farinosa): Stands of brittlebush can become masses of gold on desert hillsides in spring. One of the most prolific seed producers around, enjoyed by birds and small mammals.

DESERT SENNA (Senna covesii): Mustard yellow, cup-shaped flowers draw adult butterflies and other pollinators; leaves feed the caterpillars of some sulphur butterflies.

DESERT MARIGOLD (Baileya multiradiata): This short-lived perennial flowers bountifully—on and off throughout the year—and as with other members of the daisy family, produces copious amounts of seed for mammals and birds.

BARESTEM LARKSPUR (Delphinium scaposum): Always a favorite, the dazzling royal blue flowers have whitish centers and a tubular extension of the upper sepal that forms a long “spur.” Bumblebees pollinate by “burrowing” into the spur where the nectar is located.

DOGWEED (Thymophylla pentachaeta): Delicate and small, dogweed lives down its humble name by covering itself with golden flowers throughout the year. Serves as a larval food plant for the dainty sulphur butterfly.

DESERT MARIPOSA LILY (Calochortus kennedyi): The eye-catching, deep orange-colored flowers of this charmer arise from roundish bulbs that may remain dormant for years until stimulated by deep soaking rains.

ROCK HIBISCUS (Hibiscus denudatus): Delicate but showy lavender flowers turn deep pink toward the center. The open, cuplike flower structure invites many kinds of pollinators.

PAPERFLOWER (Psilostrophe cooperi): Blossom-covered clumps of bright yellow may be seen throughout the year, but mostly in spring and following monsoon.

DESERT GLOBE MALLOW (Sphaeralcea ambigua): Flowers abundantly and often and survives happily in vacant lots. Comes in a wide range of colors—white, lavender, pink, red—but my favorite is the apricot-colored form.

BLACKFOOT DAISY (Melampodium leucanthum): In spring, forms small bushes of sweet-smelling white flowers; plentiful amounts of seed follow.
Unless you’ve been keeping a giant secret, you have not seen a Montezuma Quail at the Paton Center. As far as we can tell, no one has, though they’ve been reported just a few hundred yards away! Montezuma Quail are a serious target bird with a varied audience that borders on fan club—hunters to birders from all over have this harlequin-faced bird on their tick-list for Southeast Arizona. Even hardcore local birders who see them frequently are universally thrilled at the veritable explosion underfoot when these secretive birds finally give up hiding and flush. If they weren’t so difficult to see, Zumers, as I call them for their flushing style and name-play, might well be one of the region’s more popular ‘gateway birds.’

The amazing monsoon season of 2021 has facilitated the launch of a collaborative project that has been under development for over two years now. The project aims to benefit Zumers across southeastern Arizona through habitat improvements and by specifically increasing their available food supply. These quail, very atypically, forage extensively for below-ground nutlets and tubers of a set of native plants. More similarly to other quail, they also eat acorns, native tepary beans, and the large naked seeds of vine mesquite grass—this grass blankets the northern end of the Richard Grand Memorial Meadow at the Paton Center.

Intentionally planted food plots are a tried and tested conservation strategy, though they normally use non-native plants. We’re upping the ante and the integrity of this approach by installing native plant plots of foods highly preferred by Montezuma Quail. This will take place first at the Paton Center and then far and wide as source materials increase and we gain willing landowner partners. Dr. Mark Stromberg, professor emeritus from the University of Arizona, has spearheaded this effort, corralled many of the project partners, and started collecting the source materials to grow out these native plants that aren’t readily available from commercial nurseries. The Arizona Quail Alliance has provided some initial seed funding, and Southern Arizona Quail Forever has volunteers eager to work on the project. As funds become available, Borderlands Restoration will grow out the food plants at a large scale; the Paton Center will become the public interpretation site as well as hosting multiple food plots; interested academic partners from ASU and the Universidad Estatal de Sonora will turn the conservation efforts into research, and we’ll begin the search for partner landowners who can host and maintain food plots long-term.

With the launch of the Montezuma Quail Food Plot project, the Paton Center may become the ‘go-to’ place for Zumers and not just for Violet-crowned Hummingbirds!

QUICK UPDATES

Paton South Parcel
By the time you read this, the Paton Center will have likely closed on the purchase of the 5.5-acre parcel that lies between the existing property and the Patagonia-Sonoita Creek Preserve. This purchase effectively extends the corridor of formally preserved lands to two miles along the creek, quite a good area that can be preserved and improved as cuckoo breeding habitat!

Paton Site Redevelopment
Plans for replacing the ailing house have officially progressed from the development and design phase—figuring out the best way to meet the Center’s ongoing needs within our particular site constraints—into the pricing phase, the final vetting stage before implementation can begin.
With fall setting in on the heels of a strong monsoon season, the Paton Center for Hummingbirds is an unparalleled location for seeing a great variety of birds. The overlap of breeding season and fall migration means birders can watch a locally hatched Lucy’s Warbler cavorting with a Wilson’s Warbler newly arrived from Utah. Or an Abert’s Towhee begging a parent for food while a Green-tailed Towhee’s gentle mewing call announces its arrival from Flagstaff in the next bush over. And the hummingbirds! Their numbers have increased in September, with multiple migrant Rufous Hummingbirds sometimes vying for feeder space with Broad-billed, Black-chinned, and Anna’s—and of course the show-stealing Violet-crowned Hummingbirds. A female Rivoli’s Hummingbird, a large, uncommon visitor from higher elevations, sometimes sneaks in. Disguised in generic female hummer colors of green and gray, it evades detection surprisingly well when seen by itself, until it perches on a feeder next to another hummer half its size!

The often unmusical yet comically pleasing song of the Yellow-breasted Chat is heard less frequently now, and the Yellow-billed Cuckoos have fallen silent if they’re even still around. But this fall, a surprising replacement for these sounds has been softly reverberating through the creekside thickets at the Paton Center: the fast-paced repetitive cooing of the Ruddy Ground-Dove, sometimes two singing at the same time. The appearance of this species in Arizona did not follow the usual pattern of border-jumping tropical species when the first one detected in the state bypassed Southeast Arizona for Phoenix in 1981. These diminutive birds are still a rarity in Patagonia, so we are fortunate to get to hear them now.

Often the vanguards of species seeking a foothold beyond their northern range limit in Mexico choose the Patagonia environs as their first stop. In 1971, it was the Black-capped Gnatcatcher at the unmarked rest stop just five miles down the highway, putting this spot on the birding circuit map. In July 1991, it was a Black-vented Oriole at Patagonia Lake, providing what is still the only record for Arizona to date. In December of that year, it was the country’s first Blue Mockingbird, perhaps the best Christmas Bird Count find ever! Then in July 1992 it was the Paton’s yard itself that attracted the first Cinnamon Hummingbird found in the U.S. Were the Paton Center to host another big birding first, it would further cement the superlative reputation of this Tucson Audubon jewel of a site.
Support Tucson Audubon Society and give a gift to foster the love of birds and nature to your friends and family this holiday season. For all generations and celebrations, the Nature Shop is here for you. Visit us in-store or online at: TUCSONAUDUBONNATURESHOP.COM.

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Make room in that cupboard for us! A coffee mug makes an easy gift or souvenir from your winter birding trip.

HOLIDAY JAVELINA BUNDLE
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Back by popular demand! Read the tale of Josefina Javelina and then spend time in the kitchen with the family. Includes book, cookie cutter, and plush.

Vermilion Flycatcher, Dan Weisz
This deciduous perennial vine with its green arrow-shaped leaves really does deserve a superlative because it is the “twining-est!” Slender stems—to 10 feet long—twine and trail around each other, over shrubs, trees, up walls, posts, trellises, patio furniture, and even along the ground. Take note that this extremely successful plant excels in taking over, particularly in a watered landscape. It may damage or strangle other plants—and some consider it a weed. Twining milkweed also reseeds easily; the seeds are capped with long white hairs, enabling them to travel (drift) through the air with just the slightest breeze. The plant forms umbel-like clusters of pungent flowers, white, pink or purplish in color, May–September. It's a medium water user, can grow in part shade, and is not fussy about soil. Despite its propensity for taking over, twining milkweed is valuable for attracting monarch and queen butterflies. The leaves and stems of milkweeds have networks of canals that store milky latex. If cut or injured, a white sap oozes out. Most plant eaters generally leave milkweeds alone because of the toxins in the leaf tissue and because the sticky sap makes for difficult eating. However, the caterpillars of monarch and queen butterflies feed exclusively on milkweed without ill effects. The plant’s toxins are transferred into the developing larvae and then to the emerging adult butterflies, making them unpalatable to predators. The birds learn to stay away. After devouring a monarch or queen (caterpillar or adult), birds may suffer violent vomiting and probably won’t try another. Interestingly, Black-headed Grosbeak is one of the few birds able to eat monarch butterflies without consequence despite the noxious chemicals eaten by the larvae; large numbers of adult butterflies are eaten in Mexico every winter.

The milkweeds were formerly in their own family, Asclepiadaceae, but the taxonomists have been busy. Milkweeds are now considered part of the dogbane family, Apocynaceae.
NORTHERN BEARDLESS-TYRANNULET (CAMPTOSTOMA IMBERBE)

In this column we look at some of our Southeast Arizona borderlands specialty bird species. Birders from all over the US travel to Southeast Arizona to add birds to their life lists, and we are proud of the birds that make our region unique! But how well do you know your local birds outside of the context of Southeast Arizona? Here we take a broader look at some of our iconic species, and try to see how they fit into the larger birding landscape.

Northern Beardless-Tyrannulet: the clean-shaven little tyrant from the north. If that isn’t an intriguing bird name, I don’t know what is! There’s a lot to talk about with this tiny flycatcher, starting with the fact that our Northern Beardless-Tyrannulet is the smallest flycatcher in the US. Yes, that tiny, crested ball of feathers and energy that goes “peep!” is a member of the tyrant flycatcher family (Tyrannidae), the largest bird family in the world with over 400 species by some measures. The Tyrannidae, found only in the New World, is known as the tyrant flycatchers as a way to distinguish them from the other flycatcher families such as the Old World flycatchers, monarch flycatchers, and paradise flycatchers, which all inhabit other parts of the world.

So, what’s a tyrannulet? Just a small version of a tyrant flycatcher. And small it is, measuring just 4.5 inches and weighing around a quarter-ounce. However, the Northern Beardless-Tyrannulet doesn’t come close to taking the title of world’s smallest flycatcher; that award would have to go to the Short-tailed Pygmy-Tyrant of the Amazon, which measures an astounding 2.5 inches from bill to tail tip!

What about the “Northern” part of this species’ common name? Well, there is in fact a Southern Beardless-Tyrannulet, closely related, and found throughout much of South America and as far north as Costa Rica. They share similar habits and habitats, but their voices are unique. Finally, what makes a tyrannulet “beardless”? This refers to the lack of rictal bristles at the base of the bill. Lots of flycatchers and other birds that grab insects out of the air (such as nighthawks) have these bristles, either to aid in the capture of their prey or to protect their eyes while capturing a meal. However, the Northern Beardless-Tyrannulet doesn’t need this type of anatomical equipment because it doesn’t forage by catching insects in flight. Beardless-tyrannulets forage by flitting around bushes or shrubs and plucking their insect prey off of foliage, much like a warbler or vireo. This foraging style is actually very common among the dizzying diversity of tyrannulets and other small tyrant flycatchers found in Central and South America.

The Northern Beardless-Tyrannulet is found from Arizona south throughout Mexico and as far as the dry northwestern portion of Costa Rica. Within the US, Southeast Arizona is surely the best place to see our one and only species of tyrannulet. The lush riparian habitats along waterways like the Santa Cruz River and Sonoita Creek are especially good places to look for this superlative Arizona bird.

Scott Olmstead is a high school teacher, member of the Arizona Bird Committee, and occasional guide for Tropical Birding Tours.
The Desert Southwest is a harsh environment. It’s hot. It’s cold. It’s dry. It’s wet. In order to make a living here, you’ve got to be tough. One such superlative critter is the desert pupfish. This federally endangered species is one of the most resilient fish in the area—they can tolerate water temperatures up to 110°F, water temperature swings up to 45°F, salinity twice that of the ocean, and very low oxygen levels. These little fish were once present in tributaries of the Gila and Colorado rivers, but due to historic water mismanagement, drought, habitat fragmentation, and competition with non-native fish, they are now restricted to only several sites within their historic range across the southwest. One thing they cannot survive is a total absence of water in their river homes.

One conservation strategy that has been employed across the region is creation of pupfish population refugia. These are protected ponds, often human-made, where pupfish populations are installed and can be monitored by scientists. These pupfish housed in the refugia can also be used as a backup option in case an existing wild population crashes, and allow for larger genetic pools than the actual suitable habitat can support. This helps address genetic bottlenecks, a common problem for rare species.

The Tucson Audubon Restoration Program recently completed the installation of a pupfish refugium in the Corral Creek Canyon area of the Patagonia Mountains. This pupfish pond was part of a five year agreement with Partners for Fish and Wildlife which also included components for other species including enhancing pollinator habitat, planting Arizona walnuts to support Western Yellow-billed Cuckoos along Corral Creek, and improving the function of the wash itself. The new pupfish pond is 20 by 30 feet with a 30 foot recirculating stream that provides enhanced breeding areas for the fish. We planted native plants along the stream, including Arizona eryngo, a rare wetland plant in the carrot family. Floating vegetation islands of native plants were also installed to improve water quality and provide habitat for a variety of wildlife. The free floating roots hanging down into the water provide excellent spots for the pupfish to hide from predators. The site is now ready to house a pupfish population, which will be managed and monitored by Arizona Game & Fish.

What do desert pupfish have to do with birds? We know that the stability and health of one species contributes to the stability and health of all species. And what is good for pupfish—clean water, connected habitat, and free-flowing water courses—is also great for birds.

What can we all do to support desert pupfish? Although creating pupfish refugia is very important, there are other ways to help protect this species: Your financial support helps make projects like these happen, and your continued support will protect other precarious species and habitats. Using less thirsty native plants in your yard, and reducing your overall water consumption leaves more water for the desert pupfish in their natural habitat.
SOUTHEAST ARIZONA BIRDING FESTIVAL
BACK IN ACTION!

Seeing people’s faces (even with a mask on), hearing the sound of familiar voices, and experiencing the joy of birds together in person at the Southeast Arizona Birding Festival was never more precious than it was this year. This is the theme we heard over and over again from participants, guides, exhibitors, and guest speakers: “It is so good to be back together!” Yes, we saw lots of great birds, including nesting Lucifer Hummingbirds, croaking Elegant Trogons, and skulky Five-striped Sparrows, but this year seemed to be about the people more than anything else.

We want to give a special thank you to the 73 volunteers who helped make the festival a wonderful experience for everyone. Volunteers hosted virtual talks, cleaned vans, greeted guests, took care of exhibitors, and so much more—throughout the entire festival, with cheerfulness and dedication.

Be sure to save the date for next year, August 10–14, 2022!

Luke Safford
Director of Engagement/Education
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THANKS TO OUR SPONSORS

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El Rio Preserve trip, Tom Brown; Lush monsoon conditions and summer poppies, Kathleen Pasierb; Purple Martin trip, Jennie MacFarland
Although I am new to Tucson Audubon and to the role of volunteer coordinator, I am already blown away by our incredible volunteers. In order to show my appreciation for everything that they do, I am going to start spotlighting volunteers quarterly in the Vermilion Flycatcher. Every volunteer contributes to our mission in a meaningful way, but sometimes someone or—in the case of this quarter’s spotlight—some team really stands out. The Paton Center volunteer team really went above and beyond this past summer, even when dealing with some unexpected obstacles.

The first hurdle thrown their way was the absence of the Paton Center’s birder-in-residence for a couple of months. Although this put extra responsibilities on the shoulders of the volunteer team, they really stepped up to the plate!

As one valued member of the Patagonia community spent some time away, another, not-so-welcome individual took his place: a young black bear! Presumably in response to the intense drought and reduced food available in the mountains, this young ursine spent numerous weeks in town, visiting trash cans and bird feeders, and even a local backyard pool. To discourage the bear from hanging around and becoming a safety hazard, we purchased bear-proof trashcans and made the decision to remove all bird feeders at the Paton Center for an extended period, until it seemed like the bear had moved back into the wilderness.

Our dedicated Paton Center volunteer team wanted so badly to keep sharing the magic of the Paton Center’s birds with visitors. Two outstanding members of the team, Kathy West and John Hughes, took it upon themselves to come to the Paton Center every night for weeks to take down and clean feeders allowing volunteers to put feeders up during the day for guests to enjoy. It’s hard to imagine a better embodiment of Tucson Audubon’s mission ‘to inspire people to enjoy and protect birds’ than these two volunteers.

Taylor Rubin  
Volunteer Program & Engagement Coordinator  
trubin@tucsonaudubon.org

In addition to our spotlight volunteer team, I also want to send a shout out to the 73 volunteers who helped make the 2021 Southeast Arizona Birding Festival possible! Not a single volunteer missed their shift, and I heard over and over how warm, welcoming, and wonderful our volunteers were. I am proud to have them all as ambassadors for Tucson Audubon!

We’d love to welcome more people to the Tucson Audubon volunteer team! If you are interested in learning more, please visit TUCSONAUDUBON.ORG/VOLUNTEER.
SHARE THE JOY OF BIRDING!

Whether you are joining us on one of our birding field trips or connecting with us through a virtual event, it is important to know you have a role in our mission of inspiring people to protect and enjoy birds. Invite a friend to join you at any of these events—birding is more fun when it’s shared!

UPCOMING VIRTUAL EVENTS USING THE ZOOM PLATFORM (Register online at TUCSONAUDUBON.ORG/NEWS-EVENTS):

• Tips on Identifying Birds with Luke Safford (October & December)
• How Birds Sing with Cynthia Faux (October)
• Birds ‘n’ Beer: Rare and Interesting Birds with Luke Safford (October & November)
• Desert Purple Martins and What We’ve Learned with Jennie MacFarland (October)
• Special Photography Guest with Hunt’s Photo & Noah Buchanan (November & January)
• Where to Go Birding in Southeast Arizona with Luke Safford (November & January)
• Crested Cuties: Phainopeplas and Northern Cardinals with Jennie MacFarland (January)
• Preparing for Lucy’s Warblers with Olya Phillips (February)

UPCOMING FIELD TRIPS (Register online at TUCSONAUDUBON.ORG/FIELDTRIPS. Please limit to 2/month):

• Sweetwater Wetlands with Luke Safford & Tom Brown every Wednesday morning
• Sabino Canyon with Karen Vandergrift (monthly)
• Accessible Birding with Marcia OBara (monthly)
• Lakeside Park with Holly Kleindienst (Oct 17 & Dec 9)
• Salt River Recreation Sites with Kathe Anderson (Oct 27)
• Gordon Hirabayashi Hike & Bird with Holly Kleindienst (Nov 5)
• Mason Center & Arthur Pack Park (1st and 3rd Saturdays beginning in November)
• Members Only: Chestnut-collared Longspurs with Jennie MacFarland (Nov 11)
• Fort Lowell Park with Holly Kleindienst (Nov 15)
• Gilbert Water Ranch with Kathe Anderson (Nov 19)
• Hawks for Beginners with John Higgins (Nov 30)
• Kennedy Park with Holly Kleindienst (Dec 9)

UPCOMING EVENTS

• Tucson Audubon Members Holiday Potluck (December)
• Christmas Bird Counts (December 14–January 5). See TUCSONAUDUBON.ORG/CBC for info

Phainopepla, a Crested Cutie, Francis Morgan

NEW

TSN-99 PROMINAR
99mm PURE FLUORITE CRYSTAL SERIES

BRIGHT, WIDE, CRYSTAL CLEAR.
MASON CENTER WINS TUCSON ELECTRIC POWER GRANT

Tucson Electric Power (TEP) has awarded the Habitat at Home program a grant of $5,000 to further fulfill the Tucson Audubon Mason Center’s education mission. The donation is one of many that TEP has granted to nonprofits and organizations throughout southern Arizona as part of their philanthropic investment in environmental stewardship.

The funding will enable Tucson Audubon to spotlight the Center’s established feeding and water stations, gardens, solar cells, composting toilets, water harvesting structures, and conservation programs such as Habitat at Home and Bird-safe Buildings. To accomplish this, we will create improved interpretive signage, enhanced pollinator gardens, and easily attainable, do-it-yourself components such as water for wildlife features, passive rainwater harvesting, and bird-safe windows. These improvements will pave the way for Tucson Audubon to produce and distribute new, accurate, and locally appropriate habitat building reference materials for Southeast Arizona residents.

Congratulations to everyone involved and a huge thank you to TEP for funding this revitalization project!

For more information or questions, please contact Kim Matsushino at kmatsushino@tucsonaudubon.org.
Three minutes after arriving at Montosa Canyon, we had already heard the chirping of one of our region’s superlative birds. The rarest breeding sparrow in the US, a Five-striped Sparrow was happily tweeting in a tree just in front of us. He stayed on one branch for several minutes, obligingly turning his head to give us some unmistakeable profile views.

At the Southeast Arizona Birding Festival, earlier that month, I had spoken to several visiting birders. Each had their own lists of target birds that drew them to our region. For so many of them, the Five-striped Sparrow was one such target. And here I was, seeing it in person, moments after getting out of the car.

I had come to the canyon with two much more experienced birders, not with any targets in mind, per se, but with an open mind and wide eyes. My companions were thrilled, not because they were seeing this rare beauty, but because I was seeing him. Their joy that day came from sharing this great find with me. That’s one of the best things about our community of birders and bird-enthusiasts: That we enjoy our passions even more by sharing them with others.

As a member of Tucson Audubon Society, you too can share your passion for birds and their habitats: Consider purchasing a gift membership for someone in your life this holiday season. The discounts at our Nature Shop, the annual subscription to the Vermitlon Flycatcher, all of the field trips and workshops—you can give all of these to a friend or family member to enjoy as well. And when you do, you are not just sharing your love of birds, you’re helping us continue our vital work in habitat restoration, in conservation, and in education. Contact us at membership@tucsonaudubon.org to find out more.

Sharing a gift membership makes you something of a superlative yourself: Most Wonderful Community Member.

Ethan Myerson
Director of Development/Communications
emyerson@tucsonaudubon.org
Soaring Among Saguaro

The mighty saguaro may be the most iconic symbol of the Sonoran Desert. This winter, your support of Tucson Audubon will help us protect and study these majestic plants and the birds who depend on them.