

# VERMILION FLYCATCHER

TUCSON AUDUBON

Spring 2021 | Vol 66 No 2



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COLORFUL  
SPRING  
MIGRATION

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# TUCSON AUDUBON SOCIETY

TUCSONAUDUBON.ORG  
Spring 2021 | Vol 66 No 2

## MISSION

Tucson Audubon inspires people to enjoy and protect birds through recreation, education, conservation, and restoration of the environment upon which we all depend.

## TUCSON AUDUBON SOCIETY

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## ON THE COVER

Scott's Oriole by Mick Thompson. Mick is a volunteer photographer/videographer for the National Audubon Society and spends half the year in Tucson.

Canon EOS 5D Mark III, EF600mm f/4L IS II USM, f/5.6, 600.0 mm, 1/640, ISO 200, Flash (off, did not fire)

ABOVE: Bullock's Oriole, RS2 Photography

# BIRDS MAY BE THE WORLD'S GREATEST MESSENGERS

As I'm writing, a singing Lucy's Warbler is reminding me that it's spring and I need to be spending more time in my garden. During a Sunday drive through the Buenos Aires National Wildlife Refuge, the Red-tailed Hawks were loud and clear: *It's nesting season, pal. Steer clear!* Lack of bird activity, though, is also a message. It's April 1 and there aren't very many Bell's Vireos being reported beyond the Santa Cruz River corridor. Why is this the case? Could it be the result of drought conditions, lack of available food, or a combination of these and other factors?

Birds demonstrate incredible resilience as they endure long migrations, navigate shifting weather patterns, and utilize, in many cases, a shrinking availability of habitat. What's more, we've created a slew of new challenges for birds, both resident and migratory. For example, human behavior has facilitated the spread of invasive species across the globe. Tucson Audubon is taking a stand against the proliferation of invasive species, which we deem are the most significant on-the-ground threat to birds in Southeast Arizona. Likewise, the very buildings where we live and work threaten the well-being of birds in migration, as well as the local birds that navigate through the built environments of our communities. Through a growing initiative, Tucson Audubon is advocating for building methods

and maintenance practices that are safer for birds. And we're not letting our elected officials off the hook either. Tucson Audubon remains a vocal supporter of the need for restoration and protection of the fragile ecosystems that exist on our nation's southern border.

Birds may be resilient, but they need our voices and attention more than ever. Birds are reminders of hope and beauty as they fly above us. We must listen to their messages. I heard from many people over the past year who either relied on birds in their yard or discovered local birds as a means of coping—and sometimes healing—during the coronavirus pandemic. I found these stories to be both powerful and moving, and they renewed my commitment to raise my voice for birds and keep Tucson Audubon and our Mission moving forward.



A handwritten signature in black ink, appearing to read 'J. Lutz'.

Jonathan E. Lutz,  
Executive Director

## CONSERVATION CAN BE YOUR LEGACY

TUCSON AUDUBON



VERMILION  
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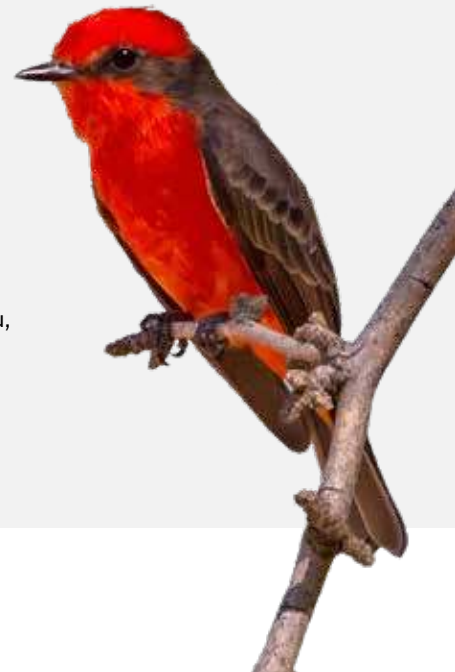
LEGACY GIVING CLUB

Over the years you have supported Tucson Audubon's mission: *inspiring people to enjoy and protect the birds of Southeast Arizona.* When you include us in your estate planning, you join many others as a member of our **Vermilion Society**—and you gain peace of mind, knowing that your values will continue to become action on behalf of birds and their habitats, far into the future.

**There are many types of Planned Gifts to explore:** gifts left by bequest in a will or trust, charitable remainder trust, beneficiary designations for your IRA, 401K, or life insurance.

We sometimes receive bequests from people whom we have never had the opportunity to thank. If you include us in your estate plans, we hope you will let us know. We value the opportunity to thank you, and your gift can inspire others in their legacy planning.

For more information, please contact: Keith Ashley, Director of Development & Communications, 520-260-6994.



# ALMANAC OF BIRDS

## APRIL TO JUNE

Spring migration is underway and some of our most colorful neo-tropical birds are on their way back to Southeast Arizona. The reds, oranges, yellows, and blacks of orioles and tanagers are gracing our backyard feeders and desert landscapes and we no longer have to rely on rare wintering Streak-backed Orioles or a random Summer Tanager in Reid Park to get our eye-candy fix. Both of these groups of birds eat fruit in addition to insects—put up a fruit feeder and see what you attract! **The Tucson Bird Count** (April 15–May 15) is the largest and longest running urban bird count with a breeding (spring) focus and is a great opportunity to see many of these colorful species while contributing to a community science project that helps conserve birds. Visit [tucsonbirds.org](http://tucsonbirds.org) to learn how you can participate.



Matt Griffiths  
*Communications Coordinator*  
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Western Tanager, Dan Weisz  
Nikon D5100, *f*/6.3, 240.0 mm, 1/160,  
ISO 400, Flash (off, did not fire)



## ORIOLES OF THE SOUTHWEST

Three oriole species breed in Southeast Arizona. The most common is the striking Hooded Oriole that some call the “palm leaf oriole” because of its preference for nesting in palm trees. This is a great species to find on the Tucson Bird Count in urban areas due to the increased presence of ornamental palms and hummingbird feeders, which they are known to frequent. This species is also found in the arid desert where, like other orioles, the female weaves a hanging basket nest composed of grass and plant fibers that is “stitched” to the underside of leaves. In Arizona, Hooded Orioles are known to mimic Ash-throated Flycatchers and Gila Woodpeckers, and they can be very difficult to view even when chattering away right in front of you—very surprising for a bright yellow-orange bird!

The Bullock’s Oriole can be called the riparian oriole of the western half of the US since it prefers streamside habitats and often builds nests in cottonwood trees. This species is our most-orange oriole and is superficially similar to the Baltimore Oriole—at one time they were considered a single species called the Northern Oriole. Even though they frequently hybridize where their ranges overlap in the Great Plains, genetic work has revealed that the two species are not closely related at all.

The Scott’s Oriole is a mountain species of the Southwest, and it is closely associated with juniper, pinyon pine, live oak, and especially yucca where it feeds on flower nectar and uses yucca fiber for their nests that hang from live yucca leaves. This bright yellow and black species is a prolific singer and its sweet, clear warble enlivens desert canyons throughout the day all summer long and even in winter.

Hooded Oriole, Tom Brown; Summer Tanager, Matthew Studebaker



## TANAGERS OF THE SOUTHWEST

In terms of bird eye-candy it’s tough to beat the three regularly occurring tanagers of Southeast Arizona. The Western Tanager is mostly a mountain species of the western half of the US (and breeds farther north than any other tanager), but is often seen in migration in urban Tucson during the Tucson Bird Count. Despite their brilliantly-colored black and yellow bodies and the flame-orange heads of males, these tanagers are difficult to spot as they slowly forage high in the canopy of tall conifers. Interestingly, Western Tanagers get their red coloration from a rare pigment called rhodoxanthin obtained from the insects they eat—other tanagers and most birds deposit red in their feathers through plant pigments known as carotenoids.

The Summer Tanager, the only completely red bird in North America, is a riparian breeder in Southeast Arizona preferring the cottonwood and willow gallery forests of our desert rivers. These long distance migrants specialize in catching bees and wasps in flight and tend to be highly vocal—listen for their robin-like song and unique, descending pit-ti-tuck calls. Surprisingly, North American tanagers in the genus *Piranga* are not true tanagers and are instead placed in the cardinal family.

The Hepatic Tanager is the truly southwest tanager, and many visitors to Southeast Arizona have this bird on their must-see lists. It is our most widely distributed tanager, ranging south to Argentina, and recent studies indicate that it could be split into three separate species. Hepatic Tanagers breed in the pine-oak habitats of our Sky Islands and are very similar to Summer Tanagers in appearance. Hepatics have grayer backs and gray face patches and dark bills, while females of both species are yellow.

# WAITING FOR WARBLERS

Excerpt from *A Season on the Wind: Inside the World of Spring Migration*

Published by Houghton Mifflin Harcourt in 2019. Used with permission.

Guest Author Kenn Kaufman



Imagine we had the power to create new kinds of birds. Imagine we decided to invent the ideal group of birds for avid birders, perfect for firing up the most dedicated watchers.

Ideal: with dozens of different kinds, because birders, even more than most people, love variety. Ideal: just the right balance of challenge and reward. We'd make them tiny, active birds, adept at dodging behind leaves, hard to see, but painted with bright colors and patterns, so they'd be worth the effort. Some would be easy to recognize at a glance; some would be much more difficult. Some would flit through treetops; others would lurk in thickets, to keep birders looking everywhere. All these birds would be strongly migratory, passing through in a rush at certain seasons, so that no one would ever, ever have time to get tired of them. Each migration season would end all too soon, leaving the fans eager for the next visit of their perfect birds.

In other words, if we were trying to create the ideal birds to keep the birders endlessly enthralled, we would invent the American warblers.



Blackpoll Warbler, Mick Thompson

The name “warbler,” in itself, is not a precise term. It has been applied to almost three hundred species of birds on six continents. Almost none of those birds ever makes a genuine warbling sound, and many species bearing the name are utterly unrelated. The name was first given to a handful of European birds long ago, and during the age of exploration it was slapped onto anything that fit the general profile: very small, active birds, hunting tiny insects among foliage. Apparently this niche is a fruitful one, and different groups of songbirds have evolved to fill it, over and over, in different parts of the world. As a result, birds called warblers today could belong to any one of 13 distinct families—unrelated, but with convergent lifestyles.

Nothing in the job description requires these small insectivores to be colorful. Indeed, most are not. Almost all the things-called-warblers in Europe, Asia, and Australia wear drab tones of olive, gray, or brown. So do most of the things-called-warblers in Africa. But America is oddly blessed. For no obvious reason, most American warblers, members of the family Parulidae, have bright colors or striking patterns or both. Aside from a few dull exceptions, most American warblers—especially adult males in

spring—are decked out in bright yellow, green, blue, orange, or chestnut, with patches or stripes of black or white. With more than fifty species north of the Mexican border, the diversity of color patterns is phenomenal. Their bright hues and sheer variety make the American warblers perennial favorites for those in the know.

No other birds draw such a stark separation between birders and nonbirders. The average nonbirder is unaware that warblers exist. They're so small, so filled with nonstop flitting energy, so good at hiding, that it takes an effort to see them at all. Most of the time they're high in treetops or deep in brushy tangles. They seldom come to bird feeders. In winter, when they would be easier to see in leafless trees, they're gone: all our northern warblers migrate south in fall, most going deep into the tropics. So the typical nonbirder has never seen warblers and has no reason to think about them.

Birders, on the other hand, think about warblers a lot. We obsess over them. The elusive nature that makes warblers invisible to the typical person only makes them more alluring for us. We want to track them down and see them all, and then see them again.

In my own birding history, I came to warblers late. Birds captured my imagination when I was six years old, so by the time I was eight or nine I certainly knew about warblers. I had read all about them, but I'd never seen one. No warblers nested in our suburban Indiana neighborhood. Undoubtedly a few came through in migration, but my eyes weren't attuned to noticing creatures so quick and small. I had no binoculars yet, so even if I had spotted a warbler, it likely would have been just a puzzling little bird that got away.

Then when I was eleven, after my family had moved to Wichita, Kansas, I connected with adults of the local Audubon chapter and began to join their field trips. I vividly recall the May day when a handful of the Audubon adults stood looking at a nearby grove of trees, casually mentioning birds they were seeing: a Nashville Warbler, a Blackpoll Warbler, an Orange-crowned Warbler. I was staring at the same trees and seeing nothing but a wall of green leaves. I wondered, wildly, if these people were making things up to make fun of me. Finally a bird flitted out onto an open twig where I could find it in my cheap department-store binoculars: a tiny bird, brilliant yellow, with red stripes down its chest. Yellow Warbler! It twitched this way and that on its twig, an intense flame of nervous energy, before zipping back into the foliage. After that I had only vague glimpses through the leaves. But that quick, clear view moved warblers from abstract idea to reality in my mind. The fact that I had waited so long to see them fueled a fascination that would never fade.



Kenn Kaufman burst onto the birding scene as a teenager in the 1970s, hitch-hiking all over North America in pursuit of birds, an adventure later chronicled in his cult-classic book *Kingbird Highway*. He is an illustrator, editor, and author of a dozen books, including his series, *Kaufman Field Guides*. See page 12 for info on Kenn's special presentation during our Birdathon on April 27.

Yellow Warbler, Matthew Studebaker  
Nikon D850, 500.0 mm f/4.0, f/5.6, 700.0 mm, 1/2500, ISO 400, Flash (off, did not fire)

# DON'T LOOK UP, LOOK DOWN: LIZARD WATCHING IN THE TUCSON AREA

Guest Author Larry “the Lizard Guy” Jones

If your neck gets sore from scanning the treetops, take a break and do some lizard watching. You can do worse than Tucson—in fact, you can't do any better, as the Tucson area is Lizard Central, having more species than pretty much anywhere in the U.S. A good way to glimpse this fact is by visiting the website of the Tucson Herpetological Society (THS). There you will find the “100-mile Circle” around Tucson and see that we have 41 species of native lizards (and 3 nonnatives) within that radius, or a full one-third of all U.S. species. This includes representatives of 9 of the 13 native families. The sky islands have 10 more-or-less-endemic species, and the valleys below have lizards from the Sonoran and Chihuahuan Deserts and grasslands.

Tucson is ideally situated biogeographically. On the west side you are near the eastern extent of the range of several species, such as Desert Iguana, Common Chuckwalla, Goode's Horned Lizard, Long-tailed Brush Lizard, and Sonoran Collared Lizard. On the east side, you have species reaching their westernmost extent, including Greater Earless Lizard, Giant Spotted Whiptail, Desert Grassland Whiptail, and Eastern Collared Lizard. When you head up into the mountains, a few more species appear, such as Madrean Alligator Lizard, Yarrow's Spiny Lizard, and Greater Short-horned Lizard. If you are a bona fide lizard aficionado, you would be remiss to not travel a little farther to see the “carrot tail” Chuckwallas of Phoenix's South Mountain Park—or even to head to Sonora to see the mighty Mexican Beaded Lizard, the giant cousin of the Gila Monster.

Snowbirds have it all backwards because lizards mostly hibernate during the winter. Lizard season generally begins in March, with a spring peak in April, then gets even better during the monsoon (July through September). Lizards are easy to find. They are found from the lowest elevations of the Sonoran Desert to the top of High Peak in the Pinalenos (Mt. Graham) at 10,724 ft. There are a few species that can thrive in urban areas, but for the best diversity explore the valleys and foothills of natural areas, such as

Saguaro National Park (SNP), Ironwood Forest National Monument, and Coronado National Forest. On the west side, a good place includes the SNP nature trail and Sendero-Esperanza Trail, while on the east side, most trails are good for lizards—Sabino Canyon is a well-known hotspot. Trail walking with close-focus binoculars is usually the best way to see lizards, although they are less likely to flee from an observer who is driving slowly in a car on a dirt road.

For those that might prefer guided lizard tours, a few of those do or did exist, but due to the pandemic, best to check ahead. Places offering lizard tours included Sabino Canyon, Tohono-Chul Park, Boyce Thompson Arboretum, and hopefully I will lead lizard walks in SNP West periodically, where I have some lizard studies. If visiting Sabino, ask for one of my lizard posters at the Visitor's Center.

Larry “the Lizard Guy” Jones is a retired biologist who studies lizards and scorpions in Tucson and has written books on lizards, amphibians, venomous animals, and habitat management.



Eastern Collared Lizard, all photos by Larry Jones



## FEATURED CREATURES



**REGAL HORNED LIZARD (*Phrynosoma solare*):** A real cloud pleaser, these ant-eating flatties are widespread around Tucson open spaces but are hard to see and locate. Try looking for them on little-traveled roads at dusk during the monsoon.



**SONORAN SPOTTED WHIPTAIL (*Aspidoscelis sonorae*):** This is a female-only (parthenogenetic) species that arose from the hybridization of other whiptails. Five of the ten Arizona whiptails are parthenogenetic.



**DESERT IGUANA (*Dipsosaurus dorsalis*):** One of my personal favorites, this species is now common in SNP West, but absent east of there. It is not only large and conspicuous, but also the most heat-adapted lizard in the U.S., often basking in temperatures well into triple digits.



**YARROW'S SPINY LIZARD (*Sceloporus jarrovi*):** If you spend any time in the mountains, these may be a familiar sight. For some reason they do not naturally occur in the Santa Catalinas, but have been introduced there.



**EASTERN COLLARED LIZARD (*Crotaphytus collaris*):** These beauties range from Missouri to Tucson. They can be seen in the Catalinas and Tortolitas, but on the west side of Tucson, the drabber Sonoran Collared Lizard (*C. nebricus*) becomes the resident species.



**SONORAN SPINY-TAILED IGUANA (*Ctenosaura macrolopha*):** These large lizards were introduced from Sonora to the grounds of the Arizona-Sonora Desert Museum but have not expanded into the adjacent Tucson Mountains. Juveniles are bright green.



**MADREAN ALLIGATOR LIZARD (*Elgaria kingii*):** These stunning lizards do not bask like most lizards, so they're not easily seen. When bird watching in the mountains, keep your ears peeled for their slithering through oak leaves. I usually see them in the fall.



**LONG-NOSED LEOPARD LIZARD (*Gambelia wislizenii*):** These large lizards often feast on other smaller lizards. They are generally uncommon, but I have been seeing them with regularity in the Tucson Mountains and Avra Valley in the spring. Hatchlings like this are rarely seen.



**GILA MONSTER (*Heloderma suspectum*):** The largest native lizard and the only venomous one in the U.S. Almost all bites are to those attempting to handle them, with extremely painful results. Spending time at Sabino or SNP East, especially after a monsoon storm, might yield a sighting.



**DESERT SPINY LIZARD (*Sceloporus magister*):** This species is common around desert homes. Beware of their look-alike, Clark's Spiny Lizard (*S. clarkii*), which occurs in some parts of Tucson, but has banded forearms.



**ORNATE TREE LIZARD (*Urosaurus ornatus*):** Both sexes blend in with rocks and tree bark when viewed from above, but males have beautiful metallic blue and green markings below during breeding season.

# LIZARDS IN YOUR LANDSCAPE



Jennie MacFarland,  
Bird Conservation Biologist  
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What's not to like about lizards? They are charismatic little reptiles that bask and do push ups on our back walls and love the desert heat even more than we do. They're fun to watch, and lizards also do quite a lot for our desert ecosystem. Not only do they consume large amounts of insects and help keep those populations in check, they in turn are food for some of our most iconic animals. Greater Roadrunners and American Kestrels both depend heavily on lizards as prey. While lizards are significant in the diets of adult roadrunners and kestrels, most importantly they are the primary source of protein for rapidly growing chicks in the spring. If you are lucky enough to have nesting roadrunners or kestrels that you can watch, you will be fascinated by the quantity and species of prey that they catch and bring to their nests. For both you will count lots of lizards of various species. In fact, roadrunners and kestrels rarely nest in an area that lacks a thriving lizard population.



How can you benefit lizards in your landscapes and attract more birds as well? **Tucson Audubon's Habitat at Home** program can teach you what to do and then certify your yard as "Lizard-friendly" when you meet the necessary criteria. Some species you might support include Clark's and Desert Spiny, Ornate Tree, Side-blotched, and Zebra-tailed Lizards, and Sonoran Spotted and Sonoran Tiger Whiptails.



Some tips include:

1. **CREATE ROCK AND BRUSH PILES:** These features help lizards hide from predators, buffer temperature fluctuations, and provide safe winter hibernation locations. A rock pile at the base of a large tree also helps protect arboreal lizards by providing a safe haven for them when they fall from a tree. We don't want to make it too easy for the kestrels and roadrunners!
2. **PLANT NATIVE PLANTS:** Native desert trees, especially velvet mesquite, that are allowed to grow in their natural shapes provide ideal temperature control and contain lots of bark crevice hiding places for lizards as well as the insect food they require.
3. **LIZARDS NEED TO EAT, TOO:** Eliminating the use of pesticides in your yard and planting native plants is a great way to create a healthy insect population that lizards can keep in balance through hunting them.
4. **ANTS:** Ants are a favorite food of Horned Lizards and harvester ants are their very favorite. These ants are very dependent on grass seeds and native grama grasses are especially important for supporting harvester ant colonies.



Visit [tucsonaudubon.org/habitat](http://tucsonaudubon.org/habitat) to join the Habitat at Home program, get info on attracting lizards and roadrunners to your yard, and to learn about installing a nestbox for American Kestrels.



Greater Roadrunner, Doris Evans; American Kestrel, Joan Gellatly; Rock pile, Kim Matsushino



# OCOTILLO, COACHWHIP, FLAMING SWORD

SCIENTIFIC NAME: *Fouquieria splendens*

FAMILY: Fouquieriaceae (Ocotillo)

NATIVE RANGE: Chihuahuan, Sonoran, and Mojave Deserts; Texas to California in the U. S. and from Baja CA to Coahuila and Zacatecas in Mexico; desert flats, rocky slopes, and mesas from sea level to 5000'; often abundant in limestone soils especially towards its upper elevational limits

WILDLIFE VALUE: Flower nectar attracts hummingbirds, orioles, verdins, finches, carpenter and other solitary bees, syrphid (aka flower) flies, and many other pollinating insects; the whiplike canes provide ideal perching spots for birds.



Lynn Hassler  
Nature Shop Garden  
Volunteer Captain

If you're looking for a striking focal specimen that attracts birds, this plant is for you. Stunning when silhouetted against a plain wall or the skyline, ocotillo has wand-like branches that rise from a central base to about 15' high and fan outward to a diameter of 10'. For our avian friends the branches provide the perfect perch for singing, and for surveying the landscape for predators, mates, food, and nesting sites. One-inch long green leaves are present during times of adequate moisture, but drop quickly under drought stress. Following rain, leaves can miraculously resprout within a matter of days. The long graceful stems are chlorophyllous; that is, they contain chlorophyll so even without leaves the plant is able to photosynthesize. From March–May the stem tips are afire with bright red-orange tubular flower tassels beckoning birds and insects aplenty.

Ocotillo is a particularly important nectar food source for hummingbirds and orioles during spring migration. Some have suggested that the flowering time of this plant was determined by hummingbirds which transverse large portions of the ocotillo's range during their northward migration.

Plant in well-drained soil in full sun. The stems are armed with stiff spines so best not to place near sidewalks or patios. Plants are slow growing, but can tolerate long periods of drought, are cold hardy (to 10 degrees), and extremely long-lived. If you feel it's necessary to remove a branch, cut all the way back to the base (rather than part way) in order to maintain the plant's sculptural beauty. Ocotillos are often sold bare-root, but seed-grown plants are also available. Water newly set out plants about once a week until established.

Ocotillo stems have traditionally been used for making fences and ramadas. Create your own "living fence" by planting individual branches close together in a line. If all goes well, they will develop roots and eventually leaves.

LEFT: Ocotillo blooms; RIGHT: Ocotillo leaves. Photos by Lynn Hassler

# TUCSON AUDUBON JOINS DOZENS OF BORDERLANDS CONSERVATION ORGANIZATIONS ON LETTER TO PRESIDENT BIDEN

In February 2021, Tucson Audubon joined 25 leaders of conservation and social justice organizations actively working in the US/Mexico borderlands as co-signatories to a letter addressed to the administration of newly-elected President, Joe Biden. The letter was authored by former Interior Secretaries, Bruce Babbitt and Sally Jewell, and titled, *Restoring Nature, Economy, and Security at the U.S. Mexico Border*. The letter, excerpted at right, intends to bring more attention to the critical issues facing people and wildlife at the southern border—a small attempt to help heal the border and help it once again be a place that both the US and Mexico celebrate for its rich cultural history, creative people, stunning beauty and outstanding biological diversity.

Read the full letter at [BIT.LY/BORDER-LETTER](https://bit.ly/border-letter).



The border wall cutting through Sonoran Desert habitat in Organ Pipe Cactus National Monument; Matt Griffiths

Dear Mr. President:

We stand with colleagues in conservation and humanitarian organizations who believe that a new approach is desperately needed, one that restores degraded lands and waters, respects the rights of indigenous people, protects the region's unique wildlife and cultural heritage, and builds a sustainable economy on the foundation of a healthy natural environment.

We propose a three-part solution to the intertwined crises unfolding at the U.S.-Mexico border, which has been developed in consultation with a diverse group of regional conservation organizations and indigenous leaders.

**1. REMOVE STRATEGIC SEGMENTS OF THE BORDER WALL FROM SACRED SITES AND CRITICAL WILDLIFE CROSSING AREAS.**

If done swiftly, this action could mitigate negative impacts on wildlife and alleviate the suffering of indigenous communities divided by wall construction.

**2. RESTORE RIPARIAN, RIVERINE, AND WETLAND HABITATS TO PROTECT AND INCREASE THE RESILIENCE OF WATER SOURCES IN THE DESERT.**

Conservation organizations and state, federal, and tribal agencies from both countries have decades of experience cooperating to restore degraded habitats, return surface waters, rebuild soils, and improve arid land for the benefit of both wildlife and agriculture.

**3. FOSTER RESTORATIVE ECONOMIC DEVELOPMENT THROUGH A BORDERLANDS RESTORATION UNIT OF YOUR CIVILIAN CLIMATE CORPS.**

A job corps program is desperately needed to provide living-wage jobs to the underemployed, particularly residents in transborder indigenous and rural communities. Such a program, funded by redirection of resources previously allocated for wall construction, should create a minimum of 2,000 jobs on each side of the border by 2022, with continued support over the coming decade.

This three-part strategy would lay the foundation for a restoration economy that empowers people to rebuild a natural resource base that can sustain rural communities and stabilize conditions at the border. The U.S.-Mexico borderlands are among the most biologically and culturally diverse regions of North America. Federal investment in a restoration economy will benefit both people and nature, with returns far exceeding program costs, and improve the United States' relationship with our southern neighbor and close ally.

We would be honored to discuss these ideas with you and your staff.

Respectfully yours,

The Honorable Bruce Babbitt  
*Former Secretary of Interior*

The Honorable Sally Jewell  
*Former Secretary of Interior*

# WILSON'S WARBLER

A visit to Tucson Audubon's Paton Center for Hummingbirds during peak spring migration (mid-April through early May) yields not only a staggering number of brightly-hued hummers, but also some of the most dazzling migrant songbirds in North America. Multi-colored warblers, shockingly orange orioles (feeding, rather appropriately, on oranges as well as hummingbird feeders), buntings with vivid blues, and the rich reds of male Summer Tanagers fill the yard with undeniable avian eye candy.

From the Center's Richard Grand Memorial Meadow, near the pond, and in low vegetation, a loud puckering kiss-like call first reveals the presence of the frenetic Wilson's Warbler (*Cardellina pusilla*). In near constant motion, this sprightly migrant distinctively flicks its wings, waggles its tail in circles, and up and down, while flitting nervously from perch to perch. Unlike most other warblers that feed at mid-level to the canopy of woodlands, Wilson's Warblers spend most of their time in the understory, hovering and gleaning insects from the foliage.

While rotund-bodied and large-headed, Wilson's Warblers are one of the smallest warblers, measuring only 4.5 inches, hence its species name *pusilla*, which means tiny. The colorful adult male is yellowish olive green on the upperparts of the body and tail and a stunning lemon yellow on underparts, lores and supercilium. A glossy black cap

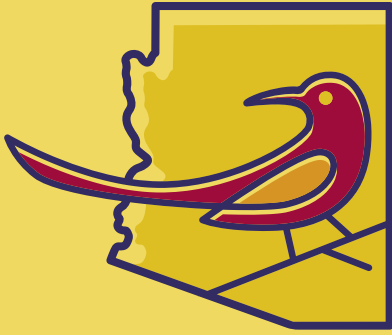
on the top of the head, and black eyes set in a yellow face are striking features. Females are similarly plumaged but duller with its cap being highly variable, from mottled black to olive. Three subspecies are recognized, and from east to west the populations become brighter yellow, with Pacific coast birds being the brightest yellow to even orangish at times.

This species breeds in wet boreal and Pacific coastal zones, throughout much of Canada, with the southernmost population nesting in Colorado and New Mexico. Some suspect this species might nest in the White Mountains of Arizona. Wilson's Warblers winter as far south as Panama, with all three subspecies overlapping there. During spring migration at the Paton Center, this species first appears in low numbers in March, increasing greatly by mid-April to mid-May, and tapering off by the end of May. Watch for the flitting of this attractive warbler in the understory, or listen for its husky thick call (compare with Yellow Warbler). I think you'll agree, it's a stunner.

Keith Kamper  
Paton Center Volunteer  
and Board Member



Wilson's Warbler, Mick Thompson



# TUCSON AUDUBON **BIRDATHON** 2021

## APRIL 9–MAY 9

It's not too late to start your Birdathon and join in supporting Tucson Audubon's mission of inspiring people to protect and enjoy birds.

It's fun and easy to participate—visit [tucsonaudubon.org/birdathon](https://tucsonaudubon.org/birdathon) to get started or email Luke Safford at [lsafford@tucsonaudubon.org](mailto:lsafford@tucsonaudubon.org).

As a registered Birdathoner, or for a donation of \$50 or more, you'll have the exclusive opportunity to join us at this special virtual event featuring author, editor, illustrator, and birder extraordinaire Kenn Kaufman on April 27!

### THEN AND NOW: ARIZONA BIRDING IN THE 1970S With Kenn Kaufman

Tuesday, April 27: 11 am–12 pm

Southern Arizona has always been a top birding region, but the attractions have changed over the years. Kenn Kaufman arrived in Tucson as an avid teenage birder in the early 1970s and spent much of the following decade birding all over the state. In this program he'll share impressions of how the scene has changed in the years since. Overall the birding in Arizona is better now than it was then, but the 1970s had some highlights. Some prized rarities were found for the first time during that decade, including Eared Quetzal, Slate-throated Redstart, Yellow Grosbeak, and Aztec Thrush. Some species like Lucifer Hummingbird and Buff-collared Nightjar were almost mythical in the early part of that decade, and have become much more widespread since. In addition to these birds of Mexican affinities, the 1970s also saw a push to look for eastern vagrants, the rise of county listing, and other developments. This will be a unique look into local birding history.



*Kenn Kaufman burst onto the birding scene as a teenager in the 1970s, hitch-hiking all over North America in pursuit of birds, an adventure later chronicled in his cult-classic book Kingbird Highway. He is an illustrator, editor, and author of a dozen books, including his series, Kaufman Field Guides. The latest is A Season on the Wind: Inside the World of Spring Migration, (read an excerpt on page 4). Kenn is a field editor for Audubon, a Fellow of the American Ornithological Society, and the only person to have received the American Birding Association's lifetime achievement award twice.*

Special thanks to our Birdathon sponsor Splendid!



[TUCSONAUDUBON.ORG/BIRDATHON](https://tucsonaudubon.org/birdathon)

# STRENGTH IN NUMBERS

## TUCSON AUDUBON 2020 ANNUAL REPORT

Stunningly beautiful winter residents of Southeast Arizona, Yellow-headed Blackbirds gather in large flocks in order to find food, safety, and warmth. Just like them, Tucson Audubon survives and thrives according to the shared strength of its members, donors, volunteers, and partners. Together we protect each other and Southeast Arizona's birds from the threats of a quickly changing world. You help us find the resources we need to fulfill our mission. And just as the flock of blackbirds provides warmth for each of its members, even in the midst of a global pandemic, our flock has managed to remain as close and connected as ever. **Thank you for the many achievements you made possible for Tucson Audubon in 2020.**



Flock, R.C. Clark: Dancing Snake Nature Photography; BELOW: Martin Molina

**TOTAL REVENUE = \$2,701,697**

**PHILANTHROPIC GIVING = 39%**

**EARNED INCOME = 13%**

**GRANTS & CONTRACTS = 48%**

DEAR FRIENDS OF TUCSON AUDUBON,

Last October at Sweetwater Wetlands, I saw a flock of Lazuli Buntings dot the stubble of a former settling pond like iridescent sapphires. As I stood at a pond-overlook in winter, a sudden wave of black and gold descended into the tall reeds next to me: dozens of Yellow-headed Blackbirds whose shining black bodies and torch-yellow heads contrasted against a subdued winter sky. The massed birds unlocked a sense of awe in my solitude. They seemed to revel in their sense of safety and strength in numbers, with dozens of eyes searching for food and watching for dangers. **Their shared purpose and collective will was palpable.**

In our isolation of the past year, many of us have grown closer to birds. We appreciate our backyard species and seasonal migrants more than ever. To walk freely without a mask, we visit our favorite birding spots. The pandemic often forced us to slow down. Many of us have looked more closely and learned more lessons from bird behavior. A flock of birds is an apt metaphor for our organization's collective commitment to our mission and purpose. Birds do it by instinct, for us it's a conscious strategy. We come together as individuals, we stay in touch by whatever means possible, and we partner with like-minded flocks to increase the impact of our work.

**Your support and encouragement go far beyond sustaining us.** You have fostered our growth during an unprecedented time, empowering us to inspire more people to enjoy and protect birds. You have supported us in deepening our relationships with partner non-profits, agencies, and foundations. With your help—and the hard work of our staff members—we are collaborating more meaningfully than ever with the US Fish and Wildlife Service, the National Park Service, Pima County, and the City of Tucson to protect vulnerable wildlife, control invasive species, and reduce the ferocity of wildfires. Thank you for flying together with us!



*Mary Walker*

Mary Walker  
Board President



# RESTORATION

We view invasive plants as a primary threat to the ecology of the Desert Southwest and our opportunity for greatest conservation impact



## LAUNCHED BRAND NEW INVASIVE PLANT PROGRAM

- Hired **3-MEMBER FEDERAL-LANDS STRIKE TEAM**
- Hired **4-MEMBER IN-HOUSE STRIKE TEAM**
- Secured **2 CONTRACTS (\$67,000)** from National Forest Foundation for mapping invasives within **2,387 ACRES** of Sabino and Bear Canyons
- Secured 3-year contract for mapping & treatment of Saddlebrooke2 HOA



## FOUNDED EL CORAZON SIN FUEGO\* PROJECT

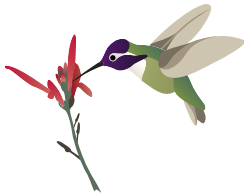
- Awarded **\$200,000** grant
- Partnership with Northwest Fire District & Pima County Flood Control
- Will remove fire-prone invasive plants from **7.2 MILES** of the Santa Cruz
- Will create **13 FIREBREAKS** to protect birds and people

*\*Heart Without Fire—this project focuses on the heart of Tucson's rivers at the confluence of the Santa Cruz River, the Rillito River, and the Cañada del Oro Wash.*



## TURNED FLOOD PROBLEMS INTO HABITAT FOR HACIENDA DEL RIO HOA

- Created habitat and increased infiltration of failing stormwater detention basins
- Planted **311** native grasses, shrubs, flowers, cacti, and trees



## COMPLETED 10 HABITAT AT HOME INSTALLATIONS

- Brought **624 NATIVE PLANTS** into neighborhood yards
- Installed **6,370 GALLONS** of active rainwater harvesting
- Planted **215 POLLINATOR PLANTS** with Community Gardens of Tucson, Marshall Elementary, and the Green Valley Community Food Bank

Emelie Chen



## TRAVELED FAR AND WIDE TO PROTECT CRITICAL HABITAT FOR BIRDS

- Farthest **NORTH**: Grand Canyon National Park
- Farthest **WEST**: Bill Williams River National Wildlife Refuge
- Farthest **SOUTH**: San Bernardino National Wildlife Refuge
- Farthest **EAST**: Bosque del Apache National Wildlife Refuge

A total of:

- 8** National Wildlife Refuges
- 2** National Parks
- 2** National Monuments
- 1** National Memorial





# COMMUNITY SCIENCE

Our conservation impact is magnified by joint efforts with the public and academic researchers



## NESTBOX PROJECT

- Built **142 NESTBOXES** in workshops pre-COVID at Wings Over Willcox Birding Festival, Centennial Elementary School, and Del Webb HOA workshops
- American Kestrel nestbox conservation plan expanded through partnership with HawkWatch International
- Delighted **110+ CHILDREN** with hands-on projects using Lucy's nestboxes

## DESERT PURPLE MARTIN STUDY

- Founded the international Desert Purple Martin Working Group
- Published an article in the Purple Martin Conservation Association magazine
- Engaged **47 VOLUNTEERS TO STUDY 50 NESTS** in pilot year (and during a pandemic!)



## BIRD-SAFE BUILDINGS PROGRAM

- Received **TWO GRANTS**, from National Audubon Society and Tracy Aviary, to launch program efforts
- Partnerships developed across SEAZ to tackle bird window strikes

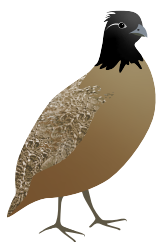
# CONSERVATION

Protecting birds and their habitats throughout Southeast Arizona has been a hallmark of Tucson Audubon's work for many years



## TUCSON BIRD COUNT (TBC)

- Engaged **93 VOLUNTEERS IN 123 ROUTES**
- Supported **THREE SCIENTIFIC STUDIES** with TBC data
- Celebrated **FOURTEENTH YEAR** of **LONGEST-RUNNING** spring urban bird count in the world

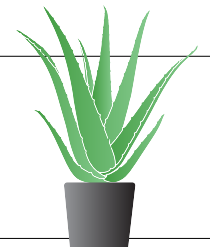


## MASKED BOBWHITE RE-INTRODUCTION AT BUENOS AIRES NATIONAL WILDLIFE REFUGE

- **THREE STAFF** quail technicians involved in the reintroduction
- Cared for **700 CHICKS** and tracked released birds to determine site usage
- Hired **ONE INTERN** with Friends of BANWR to manage supplemental feeding
- Performed invasive species control to improve vegetation composition

## HABITAT AT HOME SPRING AND FALL PLANT SALES

- **1,282 NATIVE PLANTS OF 37 SPECIES** provided for at-home habitats
- Raised **\$6,000** to support Tucson Audubon's mission



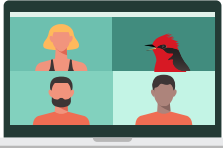
## LUCY'S WARBLERS NESTBOX PROJECT

- Estimated **680-850 LUCY'S WARBLERS** fledged from **170 NESTS** documented on our nestbox trails
- Increased total number of nestboxes on the landscape to **3,000+**
- **FOURTH YEAR** of data gathering solidified preference for triangle nestbox
- Expanded Lucy's Warbler Nestbox project into New Mexico and Colorado



# BIRDS & COMMUNITY

Where shared purpose and collective will meet good times, laughing, learning, and birding (live and virtually!)



## BROUGHT BRAND NEW VIRTUAL EVENTS AND A VIRTUAL BIRDING FESTIVAL TO A QUARANTINED PLANET

- **107 EVENTS** entertained, educated, inspired, and connected **8,417 ATTENDEES**
- Held first ever Virtual Southeast Arizona Birding Festival for **541 PARTICIPANTS** from **4 COUNTRIES** and **41 STATES**
- Raised **\$9,000+** for the Sonoita Creek Watershed

**I**NCLUSION  
**D**IVERSITY  
**E**QUITY  
**A**CCESS

## FORMALLY INITIATED AN INCLUSION, DIVERSITY, EQUITY & ACCESS (IDEA) PROGRAM FOR TUCSON AUDUBON

- Contracted with local IDEA consultants Ragland & Wilhite to support our initiative
- Raised **\$7,500** to support a Tucson Audubon Birdability program
- Partnered with Southern Arizona Adaptive Sports for **4 FIELD TRIPS** including **48 PARTICIPANTS**
- Continued our **8-YEAR RELATIONSHIP** with Changemaker High School by supporting the Tucson Climate Project



## WELCOMED THE SUPPORT OF 215 VOLUNTEERS LOGGING 8,005 HOURS FOR A VALUE OF \$217,736 (based on Independent Sector's national rate of \$27.20/hour)

- **11** Mason Center Green Gardeners
- **15** newly-trained Event volunteers
- **22** Paton Center Birding Ambassadors
- **20** Nature Shop volunteers
- **17** Santa Cruz River Bed Survey volunteers



Corey Hayes



## CONTINUED OUR FAMOUS FIELD TRIPS PROGRAM

- Pre-COVID 2020: **1,596 PARTICIPANTS, 27 LEADERS, 148 TOURS**
- Post-COVID 2020: **490 MASKED PARTICIPANTS, 13 COVID PROTOCOL-TRAINED LEADERS, 81 COVID-SAFE TOURS**



## TUCSON AUDUBON'S NATURE SHOP

- The Online Nature Shop came to the rescue in 2020, raising sales from \$9,374 in 2019 to **\$63,615** in 2020—a **578% INCREASE**.
- More than **16,000 VISITORS** to the Online Nature Shop placed **1,000+ ORDERS**. **Thank you for this phenomenal support.**

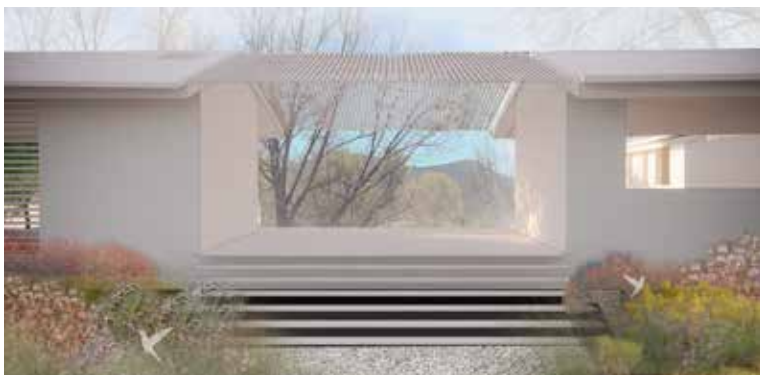


## GREW OUR MEMBERSHIP, DONOR BASE, AND SOCIAL MEDIA FOLLOWERS

- Increased memberships by **15%** over 2019, representing around **3,200 INDIVIDUALS**
- Received contributions from **1,623 DONORS**, an increase of **29%** over 2019
- Increased our social media following to **21,500**, an increase of **26%** over 2019

# THE PATON CENTER for HUMMINGBIRDS

The Paton Center for Hummingbirds, Richard Grand Memorial Meadow, and the Cuckoo Corridor continue to thrive along Sonoita Creek

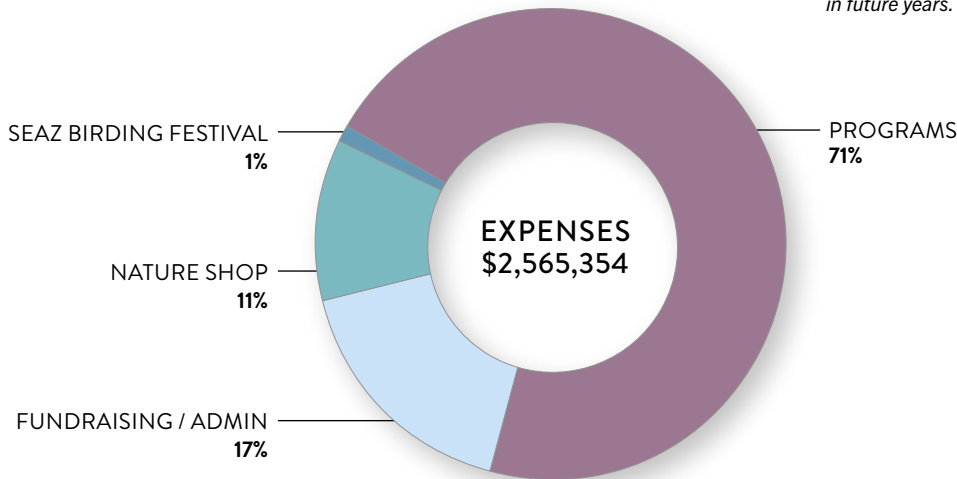
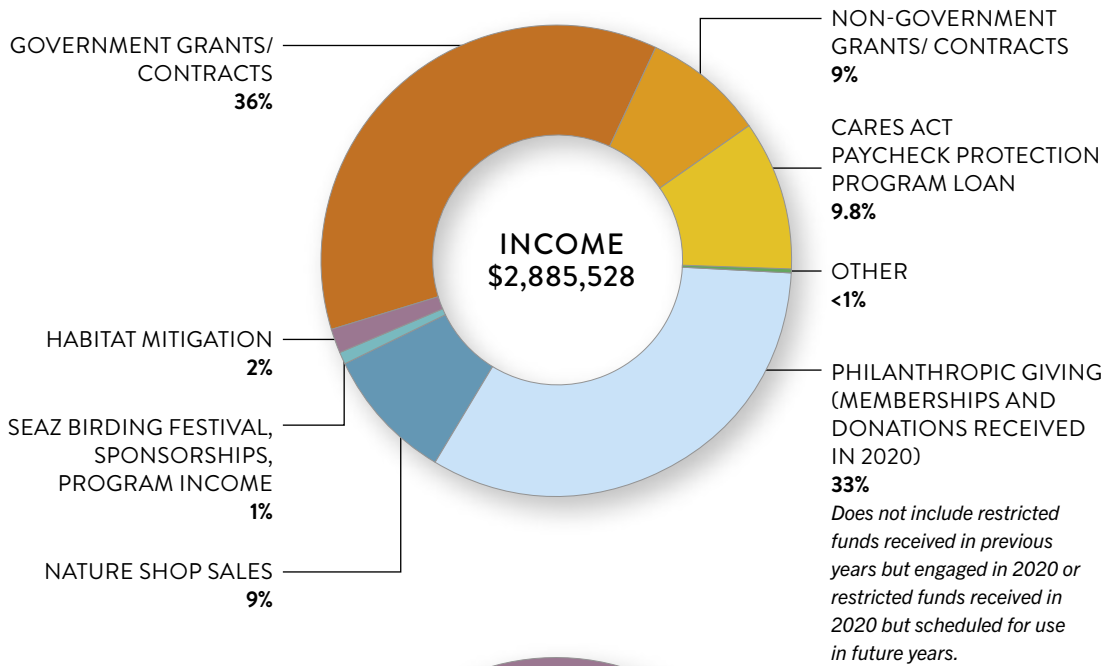


Paton Center building renderings

Tucson Audubon remained highly committed to fulfilling a new vision for the Paton Center for Hummingbirds in 2020. Despite the challenges of the coronavirus pandemic, our team of board and staff members met regularly with our contractors, Jesus Robles and Cade Hayes, of the firm, DUST. Together we accomplished a comprehensive analysis of the Paton Center property, which exists entirely in the floodway of Sonoita Creek. We achieved a Change of Use permit from the Town of Patagonia to formally transition from residential to multiple use. Finally, we initiated the Architecture and Engineering phase of the project and, as of this writing, we are nearing the half-way mark of finalizing our project design. Constructing in the floodway remains our biggest challenge, but we're also working with strong intentions to make sure our new structure, redesigned parking area, decks and walking paths, and landscaping have the lightest touch on the land as possible. We're optimistic for a formal ground-breaking early in 2022.

PATON PROJECT TEAM: Mary Walker, Laurens Halsey, Bob Hernbrode, Keith Kamper, Jonathan Horst, Jonathan Lutz

# 2020 FINANCIALS



**NET INCOME**  
**\$320,174**

## THANK YOU TO OUR LEADING CONSERVATION PARTNERS:

- National Park Service
- US Fish and Wildlife Service
- Arizona Game and Fish Department
- Saguaro National Park
- Pima County Regional Flood Control District
- The Nature Conservancy
- Pima County: Office of Sustainability and Conservation; Natural Resources, Parks & Recreation
- Friends of Buenos Aires National Wildlife Refuge
- Arizona Department of Forestry and Fire Management
- Borderlands Restoration Network
- University of Arizona (EEB/SNRE/Geography/WRRC)
- Arizona-Sonora Desert Museum
- Tohono Chul Park
- Arizona Native Plant Society
- Tucson Water

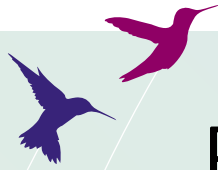
## THANK YOU TO OUR LEADING COMMUNITY PARTNERS:

- Splendido at Rancho Vistoso
- Carl Zeiss Sports Optics
- Changemaker High School & Tucson Climate Project
- Southern Arizona Adaptive Sports
- Ragland & Wilhite IDEA Consultants



John Matthews

TUCSON  
AUDUBON  
SOCIETY



# FREE *to* FLY!

TUCSON AUDUBON'S VIRTUAL FLYWAY

## ADVOCATING THROUGH ART

A big part of our mission at Tucson Audubon is to inspire the public to enjoy birds. For many, though, it's the birds who do the inspiring. Their bodies are some of nature's most impressive canvasses, painted in bright purples and yellows and reds, subtle browns and sharp whites. Nature has shaped their bodies like clay over the centuries, creating a dizzying array of shapes in their wings, beaks, and feathers. They dance, they sing, and they are muses to our creative souls.

Have the birds of Southeast Arizona ever inspired you to create a work of art? Let our whole community enjoy your paintings and poems, your sculptures and songs. Your art won't only bring joy and wonder; it may actually save a species. An international treaty, the Migratory Bird Treaty Act, ensures that thousands of migratory bird species may safely follow

their natural patterns, without interference from businesses that would ignore the birds' needs. The MBTA has been significantly weakened recently, no longer holding industry responsible for the harm they may unintentionally cause migratory birds.

Your art can help. Submit your artwork to our **Virtual Flyway** campaign. Add your own voice and story to the chorus of voices demanding the restoration of the MBTA. Every piece of art submitted by the community will be added to an ever-growing tapestry, showcasing to lawmakers and business leaders how vital it is that we protect migrating birds.

**LET BIRDS INSPIRE YOU, SO THAT WE MAY CONTINUE TO ENJOY THEM FOR GENERATIONS TO COME.**



Inspired by my first sighting of a stunning Elegant Trogon at Madera Canyon, I created this illustration of a Trogon family bringing up the next generation. I used several of my own photos for reference to create this 11"x14" piece. It makes me feel hopeful that these beautiful birds will continue to successfully nest in Arizona.

—KATHI FACHET



Painted Redstart seen at Sweetwater Wetlands on March 23, 2020. Not a usual bird at this location, but as an elder birder told me once: *any bird, any where, any time.*

—JENNIFER TATE

To see the list of migratory birds, and submit your own artwork or writing inspired by them, please visit

**[TUCSONAUDUBON.ORG/VIRTUAL-FLYWAY](http://TUCSONAUDUBON.ORG/VIRTUAL-FLYWAY).**





# MARTINS OF THE MONSOON

Purple Martin, Jim Hoagland



Jennie MacFarland,  
*Bird Conservation Biologist*  
jmacfarland@tucsonaudubon.org

Southeast Arizona’s monsoon in July and August brings seasonal abundance through frequent thunderstorms. This “fifth season” also brings Purple Martins to the Sonoran Desert. As birders escape the summer heat by abandoning the lowland deserts to visit our stunning Sky Island mountain ranges, it can be very easy to overlook these special saguaro nesting swallows.

Purple Martins are charismatic, large swallows that are a beloved and iconic nestbox species in the eastern half of the United States. The Desert Purple Martin (*Progne subis hesperia*) is a distinct subspecies that times their nesting to monsoon abundance and nests almost exclusively in saguaros or other large columnar cacti. They are “wild” martins that use naturally occurring cavities, often created by woodpeckers, while the Eastern subspecies is said to be almost entirely reliant on human-made nestboxes. Desert Purple Martins are also extremely understudied with large gaps in basic knowledge about their nesting, migration and wintering grounds. Tucson Audubon launched a study to learn more about these fascinating birds in 2020—**The Desert Purple Martin Project**.

It was challenging to launch a new study in 2020. We dealt with restrictions on group surveys due to the pandemic and summer rainfall totals that were so low the monsoon season was referred to as a “non-soon.” Despite all of these challenges, we had an amazing pilot-year for this study with over 40 volunteers participating. We documented 63 nesting saguaros, more than 30 additional nesting areas, and observed over 20 roosting locations. From July through September, the team collected detailed observations

of breeding behavior and other natural history events. Our major findings were that Desert Purple Martins prefer high nesting cavities, require high quality Sonoran Desert habitat, and prefer to roost near riparian areas or other water sources.

We were also able to make some observations on their nesting behavior. Desert Purple Martins have never been documented using human made nesting structures in Arizona they nest almost exclusively in woodpecker-created saguaro cavities. All the nests we found were in saguaro cavities and ranged from 8 feet to 25 feet above the ground with most nests being 15–25 feet high. We also documented the compass direction orientation of nesting cavities but no strong pattern has yet emerged. Nests were found in every direction with over half having a westerly aspect. More data could help us understand if there is a clear preference of direction or if the saguaro cavities are so insulated that other cavity factors such as size and depth play a more important role.

Timing is also a key focus of our investigations. Desert Purple Martins arrive in Sonoran Desert nesting areas around mid-May and we observed them defending nesting saguaros throughout June. We documented observations of birds carrying nesting material in June, including a young male carrying around saguaro fruit husks. This behaviour appeared to be linked to courting or pair bonding, nest site investigation, and guarding behavior of preferred saguaros instead of actual nesting. The first nest we documented with eggs was in mid-July with chicks observed in late July through August. Much of this data came from dedicated volunteers

that spent many hours observing the birds and gathering clues on their nesting status from behaviour happening outside of the cavity. This can be surprisingly effective if you observe adults carrying nesting material or insect prey to their mate or chicks.

Looking directly into nests provides significantly more specific and detailed information. Two Tucson Audubon staff members acquired a permit to use wireless bluetooth endoscope cameras to do this. Not as easy as it sounds, through trial and error Jennie MacFarland and Olya Phillips were able to use very long telescoping poles to poke the tiny attached endoscope cameras into the entrances of 25-foot-high nest cavities to view the images on smartphones. The resulting photos and video clips documented specific data on the timing of nesting stages—most of the chicks we observed by mid-August were large and mostly if not fully feathered.

Late August into September, Desert Purple Martins began to gather into larger groups and prepare for their fall migration. We had reports of

flocks gathering together in several areas in the Tucson area and received information from long-time residents that some of these areas have been used as pre-migration staging areas for many years. By early October Desert Purple Martins had nearly disappeared from Southeast Arizona and were on their way back to somewhere in South America, likely Brazil—their exact migration route and wintering location remain a mystery.

Tucson Audubon plans to build upon the success of last summer’s pilot study by expanding the scope and geographic footprint of the project. With the help of partners such as Northern Arizona University and the Purple Martin Conservation Association, we will be able to add new elements to our investigations including lab analysis of feathers and location trackers attached to adult birds to solve the mysteries of their migration. In 2021 we hope to get more people involved in this effort. Look for volunteer opportunities and learn more about the Desert Purple Martin Project at [tucsonaudubon.org/purplemartin](http://tucsonaudubon.org/purplemartin).



CLOCKWISE FROM TOP LEFT: Female Purple Martin at nest cavity, Richard Fray; Jennie MacFarland scoping a martin nest at Greasewood Park, Joyce Quinn; View from the endoscope camera.

# YELLOW-BREASTED CHAT (*ICTERIA VIRENS*)

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.

Yellow-breasted Chat, the skulking songster that nests along our riparian corridors and calls out like a phantom from dense thickets, is much more typically heard than seen. Although it's not often that we get to lay eyes on this handsome and colorful songbird, if you tune your ear to recognize its many loud vocalizations, you'll find that it's quite common where our desert rivers and washes still contain surface water. However, this acoustic training in itself may be a challenge, due to the diversity of sounds that chats can make. In his monumental 1951 work *Arizona and its Bird Life*, Herbert Brandt remarked of the chat's repertoire: "the variety is so wide that almost any unusual sound emanating from a dense, leafy retreat I have learned by the hard way to put down as an utterance of the chat, unless it later proves to be something else, and usually it does not." This unusual voice and reclusive habits lend the chat ample mystique, which we find is easily substantiated if we look at *Icteria virens* in the avian family tree.

I'll take a bold stance: the Yellow-breasted Chat is one of our most distinctive species in Arizona, even in all of North America! But to see why, we'll have to look beyond its name, which might deceive us at first. You'd be forgiven if you supposed the Yellow-breasted Chat was related to the three handsome chats from the New World tropics in the genus *Granatellus* (classified in the grosbeak family), or the several Old World chats in the genus *Oenanthe* (actually they're wheatears), or the pallid desert-loving African chats in the genus *Emarginata* (from the Old World flycatcher family), or the gaudy Australian chats in the genus *Epthianura* (members of the honeyeater family); our chat is not related to any of these chats or any of the other birds named "chat" from around the world. In fact, it seems the name "chat" is not at all instructive if we're trying to understand the taxonomic relationships of our subject species.

However, looking at the scientific name *Icteria virens* we get a clue to the bigger picture. While long thought to possibly be a strange and aberrant member of the warbler family, few ornithologists felt confident in this placement, with many characteristics such as its voice and size seeming to contradict a relationship with the warblers. Modern genetic analysis has confirmed what was already suggested by field experience, that the Yellow-breasted Chat is not a warbler. The closest relatives appear to be the New World blackbirds in the family Icteridae, hence the appropriateness of the chat's scientific name. And to what family does our chat belong? The Yellow-breasted Chat seems to be best classified in its own family, making it the sole member of the family Icteriidae.

By the time you're reading this, chats may be back! They return to Southeast Arizona from their wintering territories south of the border in April. Limited data from ongoing field studies suggest that our western populations of this species spend their winters along the Pacific slope of Mexico, while eastern populations may winter across a broader swath of Mexico or farther south into Central America. This year, when you encounter a chat in the field, I hope you'll take a moment to reflect on what a singularly unique member of our Arizona avifauna it is.



Scott Olmstead is a high school teacher, member of the Arizona Bird Committee, and occasional guide for Tropical Birding Tours.





# EL CORAZÓN SIN FUEGO, A TINDERBOX READY TO IGNITE

Just south of Ina Road lies the Corazón, the heart of the lower Santa Cruz River at the confluence of the Rillito and Cañada del Oro Wash. There's permanent water in the river here, thanks to the water treatment facilities just upstream. More importantly, regardless of whether the region's spotty rainfall occurs in Oro Valley, in the Rincon and Catalina Mountains, or anywhere to the south, flows merge here making the Corazón both flood-prone and capable of maintaining incredibly dense and valuable riparian habitat.



Unfortunately, these same conditions, left unmanaged, can lead to severe infestations by fire-bearing invasive plants, both trees and grasses, ready to fuel yet another linear fire wiping out long stretches of the important bird migratory pathways and critical habitat that exist along our desert rivers. This is the current state of the Corazón...a tinderbox ready to ignite.

Along with partners Northwest Fire District and Pima County Regional Flood Control, we have begun a project to prevent catastrophic fires from spreading along 7.2 miles of the Santa Cruz and up into the Rillito and Cañada del Oro. First, to limit the potential spread of fire, we're creating 13 fire breaks—gaps in the vegetation through which fire cannot pass. After that, we'll begin controlling invasive grasses in the

project area to limit spread of fire elsewhere. The most intense part of the project will be removing an exceptionally dense, 27-acre patch of large saltcedar trees, growing right where there's the best potential for high value riparian habitat.

While this project doesn't involve any revegetation, it serves to protect existing high-value riparian migration corridors from catastrophic loss. It is surgical vegetation removal for the protection of the whole. And, happily, it paves the way for a much larger riparian restoration project currently in planning stages with Flood Control. In a Corazón without fire, birds and people both win.



LEFT: Strike Team members cross the trickling Santa Cruz River while creating a fire break. RIGHT: Firefighters from Northwest Fire District cut invasive salt cedar from the project area as part of regular chainsaw training exercises. Photos by Kari Hackney

Jonathan Horst  
Director of Conservation & Research  
jhorst@tucsonaudubon.org



# SOUTHERN ARIZONA ADAPTIVE SPORTS: ALWAYS ON THE MOVE



“WE WANT TO MAKE SURE **EVERYONE** CAN ENJOY THEIR TIME IN NATURE AND THEIR TIME WITH BIRDS.”

Photos by Rhianyon Larson

When Mia Hansen speaks about birding, you can hear in her voice just how much it means to her. As the Executive Director of Southern Arizona Adaptive Sports (SAAS), Hansen wants to make sure that everyone who shares her love of birds can get outdoors and enjoy them. Recently, SAAS has partnered with Tucson Audubon for several excursions to Sweetwater Wetlands.



Through SAAS birding excursions, birders with physical mobility challenges, such as amputations, limb loss, muscular dystrophy or multiple sclerosis, can enjoy the beauty of Southeast Arizona’s birds and their habitats. The hard packed trails at Sweetwater Wetlands allow for easy access for chair users, but Hansen points out that not every trail is

so thoughtfully designed. “Imagine traveling two hours to a prime birding location, only to find that you can’t even cross the parking lot because of the gravel.” Hansen envisions a world of radical inclusion, where spaces are designed from the very beginning with an understanding of all the different uses and users of those spaces. Rather than asking “How can we redesign this space to make it more accessible?”, Hansen asks, “Why weren’t these trails designed with all users in mind from the beginning?”

At Tucson Audubon, we are committed to making sure that, when it comes to appreciating birds, everyone is included. We share Mia’s vision of radical inclusion. When our Community Engagement Manager, Luke Safford, accompanied Mia on a birding expedition at Sweetwater Wetlands, he became aware of how different the experience can be for birders with mobility challenges. “It gave me a different perspective, seeing things in a way I never had before.” That perspective is helping us rethink how we can make sure that birding is accessible to all.

Mia’s favorite birds include juncos and Vermilion Flycatchers. She describes them as being industrious and “always on the move”, thoughtfully adding, “Maybe I see a little of myself in them.” With everything she does to make birding accessible to all, we couldn’t agree more.

For more information on Southern Arizona Adaptive Sports, please contact Mia Hansen at [info@sozadaptivesports.org](mailto:info@sozadaptivesports.org) or call 520-370-0588.

TUCSON AUDUBON SOCIETY

# BIRDS & COMMUNITY



Have you found yourself curious about the various species of cacti in Arizona and where to find them, or maybe you're more bird-centric and want to explore some good birding areas in the next few months? Want to whet your appetite for international travel by joining a virtual field trip to Costa Rica or dreaming about seeing a Bearded Vulture in Spain? Maybe you're looking for tips on how to take the best nature photos with your phone for your Instagram page? We've got all that and more for you!

More information at: [TUCSONAUDUBON.ORG/NEWS-EVENTS](https://TUCSONAUDUBON.ORG/NEWS-EVENTS)

## Consider registering for one of these upcoming virtual events using the Zoom platform:

Tuesday, April 13, May, & June

### TIPS ON IDENTIFYING BIRDS WITH LUKE SAFFORD

This is a fun and lively workshop where you're invited to share pictures of birds you've struggled with and together we'll work through the identifying process. Great for beginners and experts alike!

Thursday, April 15 & May

### NATIONAL PARK SERVICE LECTURE SERIES

We have been partnering with the National Park Service to share presentations monthly. In April we'll hear about the indigenous history and use of wild turkeys.

Monday, April 19

### THE BIRDS OF SPAIN WITH OLIVER REVILLE

Have you ever heard of, or seen, a Bearded Vulture? Here's your chance! Spain offers excellent birding and is waiting for you to explore its variety of birds.



Thursday, April 22

### SPINES, FEATHERS, AND FIELD GUIDES WITH THOMAS STAUDT

Thomas Staudt, editor and creator of *Field Guide to Cacti and other Succulents of Arizona* will take you on a tour of Arizona's 90 species of cacti, 16 agave, and numerous succulent species.

European Bee-eater, Oliver Reville; Crab, Todd Nettelhorst

Monday evenings April 26, May 24, June 28

### BIRDS 'N' BEER: RARE & INTERESTING BIRDS IN SEAZ WITH LUKE SAFFORD

Thursday April 29

### BIRDING THE CALENDAR WITH LUKE SAFFORD

Tuesday, May 4

### PHONE PHOTOGRAPHY: FROM POCKET TO POST WITH TODD NETTELHORST AND HUNT'S PHOTO

You'll be introduced to camera apps, modes, settings, processing tools, and accessories such as lenses to help you use your smartphone to capture amazing images.



Thursday, May 20

### VIRTUAL BIRDING: REAL-TIME LIVE BIRDING IN COSTA RICA IN PARTNERSHIP WITH MOWGLI EXPEDITIONS

Experience real-time virtual birding with a guide in a remote forest in Costa Rica. In an instant, we will be transported to the rainforest, exploring and looking for birds. Cost: \$15.

May

### THE "BRAND NEW" TO BIRDING SERIES WITH LUKE SAFFORD

Birding can be a rewarding hobby. Getting started doesn't have to be confusing! Let Luke Safford show you the ins and outs of where and when to start your adventure, and how to identify the species you're most likely to encounter.

# SAVE THE DATE FOR THE SOUTHEAST ARIZONA BIRDING FESTIVAL AUGUST 11-15, 2021



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**VIRTUAL OR IN PERSON—  
WE’LL CELEBRATE 10 YEARS  
OF FINDING LIFE BIRDS IN  
SOUTHEAST ARIZONA!**

REGISTRATION OPENING IN MAY

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[TUCSONAUDUBON.ORG/FESTIVAL](https://tucsonaudubon.org/festival)

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Vermilion Flycatcher, Freddie Huang

# Soar on the Wings of Experience

"This happy homeowner wholeheartedly recommends Kimberlyn Drew. She expertly guided us through the purchase of our first home in Tucson... She was and continues to be a great local resource for us as well as a terrific asset to our community!"  
—Erin & Scott Olmstead

"Kimberlyn patiently helped us through a long negotiation and the outcome was excellent... We could not be happier!"  
—Karl and Sandy Elers"



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A BERKSHIRE HATHAWAY AFFILIATE



## TUCSON AUDUBON WELCOMES NEW BOARD MEMBERS

ANDRÉS ANCHONDO O. (he/him/él)



Andrés was born and raised in Chihuahua, Mexico. He has a Bachelor's degree in Finance and a Master's degree in Agroforestry and Sustainable Development. For his master's degree, Andrés researched ways to restore and enhance Montezuma Quail habitat in agricultural landscapes in central Mexico.

Andrés joined DC Audubon Society in 2017, becoming the first international board member. During his term with the organization, he spearheaded a number of diversity and outreach initiatives. As part of his commitment to increase opportunities for young Black and Latinx birders, he joined the nationwide Black and Latinx Birders Scholarship Fund in 2020. The Fund aims to amplify the successes of Black and Latinx Birders by raising funds for annual scholarships and creating networks of support.

Andrés works for American Bird Conservancy (ABC) to conserve migratory birds and their habitats in Latin America. He continues to work on a variety of projects focused on birds and conservation.

Andrés' favorite bird is the Mourning Dove, as its call reminds him of home in the Chihuahuan Desert.

MICHAEL T. BOGAN (he/him)



Michael is an Assistant Professor of Aquatic biology at the University of Arizona. Originally from California, he earned his PhD at Oregon State University, where his research focused on stream ecosystems of the Madrean Sky Islands and Sonoran Desert. He is well-known for his work on Santa Cruz River Heritage Project, and his beautiful photos of dragonflies. His research topics include Arid Lands, Conservation Biology, Invasive Species and Population and Community Ecology.

Michael serves as the faculty advisor for the UA chapter of the Society for the Advancement of Chicanos Hispanics and Native Americans in Science, a national Diversity in STEM organization. Michael is a partner on our Santa Cruz River Heritage Project work and has contributed to the *Vermilion Flycatcher* in the past year.

Michael has a hard time choosing a single favorite bird, but says that Curve-billed Thrashers are pretty hard to beat. "I could watch them goofing around through the leaf litter and be entertained for days!"

### DOCUMENTING THRASHERS IN SOUTHWEST ARIZONA

LeConte's Thrashers are an elusive and enigmatic thrasher species that has very specific habitat needs and lives year-round in the region's harshest and driest desert areas. In early spring their lovely, repeating song can be heard over low elevation Sonoran Desert in southwest Arizona. This is not a bird you would find near Tucson, but up until the 1970s one could find LeConte's Thrashers in specific locations in southeast Arizona, and today the "Thrasher Spot" near Buckeye is a popular place birders look for this very pale, sandy-colored thrasher.

Tucson Audubon is surveying these hardy birds on the Barry M. Goldwater Range (BMGR), located south of Interstate 8 between Gila Bend

and Yuma. These contracted surveys are part of a larger effort of the **Desert Thrasher Working Group** to better understand the habitat needs and preferences of LeConte's and Bendire's Thrashers. The low elevation Sonoran Desert on the BMGR is drier than what we are used to in the Tucson area and more sparsely vegetated. Only specific birds thrive in this habitat, and Tucson Audubon's two surveyors did document LeConte's Thrashers there. During survey visits in January and March, several territories were identified near survey plots with one singing male documented within a survey plot. The third and final survey visit is scheduled for early April and we are hoping to find nesting LeConte's Thrashers—stay tuned for updates!



LeConte's Thrasher, Jennie MacFarland

### GIFTS IN HONOR OR MEMORY OF

In memory of Alice Johnston from Holly Himebaugh  
In honor of Anita Jones from Helen Jones  
In honor of Annie Hat from V. Spike Peterson  
In memory of Anthony J. Lauro from Mary Normandia & Seth Ausubel  
In honor of Ariana LaPorte from Liz Prohaska  
In honor of Barbara Schneidau from Susan Aiken  
In honor of Beth Acree from Janet Wilkerson  
In honor of Betsy Gulotta from Julie Gibson  
In memory of Betty Howarth from Read Howarth  
In memory of Bill Bickel from Joanne & Charles Curtis  
In memory of Carmen Christy from Arthur & Pixi Lewis  
In memory of Charles Naeser from Nancy Naeser  
In honor of Coe Slattery from Andrew Slattery  
In honor of Debbie Honan from Darlene Smyth  
In honor of Dennis Wurst from Fran Luchs  
In honor of Doris Wright from Candace Charvoz Frank  
In memory of Elizabeth Dalesio from Christine Hennessey  
In memory of Fred J. Baron from Michele Frisella  
In honor of Hope Gillerman from MaryAnn Capehart  
In honor of Jane C. Reichart from Jan Bell & Salvador Navarrete  
In honor of Janine Spencer from Allison Glasson  
In memory of Jean Besich from Pamela & Richard Smith  
In honor of Jim Hoagland from Cathy Johnson and Jan Smith  
In memory of Judy V. from Stephanie DeArmond  
In honor of Keith Ashley from Tom Buchanan & Robert Bell  
In memory of Leslie Conger from Alan Conger  
In honor of Leslie Galloway Walker from Perry Benson  
In honor of Lydia Breunig from Lee Pagni

In honor of Maia Stark from Karen Enyedy & Robert Breunig  
In honor of Marcia & Ty Tingley from Will Lidwell  
In memory of Marion & Wally Paton from Judith Whitcomb  
In memory of Martha Jean Cary from Linda Moulton  
In memory of Martha McKibben from Jeff Schlegel  
In honor of Mary Fitzgibbons from Mary Williams  
In honor of Mickey & Marty Baumrind from S. Alexandra Baumrind  
In honor of Prudy & Bob Bowers from Jon Bowers  
In memory of Roger Gibbs from Marilyn Browning  
In memory of Steve Sorensen from Kristen Sorensen  
In honor of Sylvia VanGundy from Elizabeth Hoffman  
In honor of TJ Marsh from Riley Marsh  
In honor of Virginia Rose from Cathryn Rose  
For William Klittich from Carla Klittich



Bullock's Oriole, Mick Thompson

# UNMUTING OURSELVES: SHARING BIRDS AS COMMON GROUND

Videoconferencing (aka staring at your computer screen for Zoom meetings and Virtual Events) can be less than satisfying, even downright irritating, especially when you find yourself practically *living* on the Zoom platform during a global pandemic. *Zoom fatigue is real, friends!* But we would also like to celebrate, over the course of the last 12 months, just how many wonders occur in that virtual space, especially when you're Zooming together about birds.

The division in our world during 2020 was devastating. The political divide, the race divide, the social equity and wealth divides—all of this at the very same time that families and friends were torn apart and left lonely or grieving in the shadow of COVID.

**Interesting that so much of the world was also taking notice: in troubling times, birds can bring us personal peace, and can bring us together.**

While the two of us have always shared a strong belief in the power of both community and birds, the experiences of 2020 heightened our awareness of the power of birds as a healing and uniting force, even when we are confined to meeting up on virtual platforms.

Looking back, we will remember opening up our Birds & Community Virtual Events 15 minutes early so that people could simply visit. And asking people to unmute themselves at the end of events, so that we could get as close as possible to connecting in person: seeing a face (even frozen on a computer screen), hearing a voice, or a dog barking from another room. These things helped us empathize with one another. The conversation often shifted from talking about birds to talking about ourselves and the role that birds play in our lives, in our health, in our emotional and spiritual wellness.

Tucson Audubon member Nancy Bilderbeck wrote to us last year from London, England:

During those very dark days, it was the Tucson Audubon Zooms and the Paton Center webcams that kept me seeing light at the end of the tunnel. No kidding...birds saved my life! I am forever indebted.

We are also indebted—to the community that has stuck by us and pulled together around Tucson Audubon's mission, willing to voice the very personal struggles we've all been facing, willing to unmute themselves as we recognize our common ground, enjoying and protecting the birds of Southeast Arizona.



Violet-crowned Hummingbird at the Paton Center, Thomas Heher

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## TUCSON AUDUBON NATURE SHOPS

### PLEASE NOTE

The Nature Shop is now OPEN for regular Shop hours. Face coverings are required to enter and the number of customers will be limited to a maximum of four.

Shop with us anytime online.  
New merchandise added continually.  
[tucsonaudubonnatureshop.com](http://tucsonaudubonnatureshop.com)

### MAIN SHOP

300 E University Blvd #120, Tucson 85705  
(corner of University & 5th Ave.)

Regular Nature Shop hours:  
Wed–Fri, 10:00–4:00 & Sat 10:00–2:00

### AGUA CALIENTE PARK SHOP

The Nature Shop at Agua Caliente Park  
is permanently closed.

There's never any sales tax since we're a non-profit,  
and all purchases support our mission to protect  
birds and their habitat.

# TAKE YOUR BIRDING TO THE NEXT LEVEL

Is there a better time to up your bird watching game than spring? As another colorful migration season passes through Southeast Arizona, make sure you're ready to properly view and learn about the birds you're seeing on your adventures near and far.



Peterson Field Guide  
to Birds of North America  
2nd Edition  
\$30.00



GCI PackSeat  
\$25.00



Kowa TSN883  
Angled Spotting Scope  
Complete Kit  
MSRP \$3500  
Member Price \$3150



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\$52.00



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Pajaro Grande  
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