

VERMILION FLYCATCHER

TUCSON AUDUBON

Winter 2022 | Vol 67 No 1



BIRDS + PLANTS

TUCSON AUDUBON SOCIETY

TUCSONAUDUBON.ORG

Winter 2022 | Vol 67 No 1

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

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

ABOVE: Anna's Hummingbird, R.C. Clark: Dancing Snake Nature Photography

TUCSON AUDUBON IS REACHING NEW LEVELS, ENJOY THE RIDE WITH US

As 2022 begins and I contemplate the ending of my term as board president, it seems the prior year has been unique and more like a roller coaster ride than a breezy sail. Whether a person abhors the ascents and the precipitous falls of a roller coaster, or thrills to those sensations, there comes a point when everyone is grateful to return to steady ground. And if we have landed on a higher plane than where we started, we can look forward clearly with renewed optimism. That's where I feel we've landed at Tucson Audubon, and I'm grateful for your support along this journey.

We are looking at a future of greater financial strength with a budget that shows a 35% increase over last year's, due to an increased donor base and expanded grants and contracts. We can now restore more local habitats and expand on the success of our Habitat at Home program, which saw 344 residences and 15 businesses, parks, schools and demonstration gardens partner with us. Our community science work is also growing, to the benefit of Purple Martins, Lucy's Warblers, and other beloved species.

Here is a brief recap of a roller coaster year of governance and management, hang on!

- Our Executive Director, Jonathan Lutz, resigned in June 2021 after three very successful years here. He had shepherded our amazing staff through the early stages of a pandemic, while instituting reliable financial controls, increasing staff, and lending his vision for the planned Paton Center visitor center.
- Patti Caldwell joined our ride in June as Interim ED, bringing her unsurpassed competence and positivity to help develop our staff, and oversee an employee compensation analysis and equity implementation. We hope to hold Patti in close communication and friendship as we move ahead.
- At year end we confidently chose Michael McDonald as our incoming ED. Michael has been a stellar leader in Tucson and our region. He comes to us following a nationwide search and brings with him a wealth of experience, having initially excelled in business, then passionately serving several significant conservation and social services nonprofits. We welcome Michael most heartily and I hope each of you will meet him soon.

Every new year brings new hope and new adventures. I look forward to sharing this one with you as we ride along solid rails, with steady hands at the controls, and with bright hopes for bringing more people to Tucson Audubon. Thank you for your partnership!



Mary Walker

Mary Walker
Board President

Let Your Legacy Soar

Birds have made a lasting impact on your life; now let them be a part of your legacy. By including Tucson Audubon in your estate plans, you help us protect generations of birds for decades to come. Call or email today to join the Vermilion Society and become part of the long term future for birds in Southeast Arizona.

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T U C S O N A U D U B O N



VERMILION
SOCIETY

L E G A C Y G I V I N G C L U B

ALMANAC *of* BIRDS

JANUARY to MARCH

In most of North America, January is a month where habitat is still gripped by cold and resources are thin. In the Sonoran Desert however, our familiar year-round resident birds are already gearing up to breed in the relatively warm winter conditions here. Great Horned Owls are among the earliest and can have nestlings in January. These owls select old stick nests built by other raptors, ravens, and even herons, but they aren't picky about the type of tree it's in. Some of our other early nesters are very closely associated with specific shrubs or trees and the link between these birds and "their" plants is strong.



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Great Horned Owl, Mick Thompson



ANNA'S AND COSTA'S HUMMINGBIRDS

Another very early breeder in Arizona, Anna's Hummingbird nests and young can be found in December. These birds live in a wide variety of habitats from the deserts to mountains but most nest in riparian woodlands and lush, urban areas. They aren't particularly picky about where they place nests with most being in a variety of trees and shrubs: mesquite, juniper, sycamore, cottonwood, ponderosa, and many exotics. In great contrast, Arizona's smallest breeding bird, the desert-dwelling Costa's Hummingbird, heavily favors lush Sonoran Desert, especially wash areas with a diverse array of tree species. Nesting areas are associated with chuparosa, ocotillo, and other tubular flowering species, and they generally avoid urban neighborhoods with their exotic plant species.

Some Costa's Hummingbirds are resident in Southeast Arizona, but the majority of the breeding birds arrive in October, the opposite of our summer breeders—by late spring when the desert heats up, the population leaves for cooler coastal areas west of Arizona. When chuparosa blooms in late fall, male Costa's Hummingbirds start their singing and flight displays. Nest construction begins in mid-January, egg laying in February, with nesting peaking by April. According to breeding bird surveys, 68% of nests are found in blue or foothills palo verde trees.

Costa's Hummingbird, Dan Weisz
Black-tailed Gnatcatcher, Dan Weisz
Curve-billed Thrasher, Francis Morgan



VERDIN AND BLACK-TAILED GNATCATCHER

Two more of our desert-dwelling birds, neither much larger than hummingbirds, are closely associated with specific habitats and plants. The Verdin is no stranger to backyard birders as this charismatic species is right at home out in the desert as well as urban areas. It is a prolific nest builder, often having multiple roosts during summer and winter—cold weather nests are thicker, larger, and higher in the canopy to take advantage of warming sunlight. Their globe nests with downward-facing entries are also well-built and can last for years. Verdins become territorial in January and can have nests with eggs in February, activity peaking by mid-March. They favor our desert trees, including ironwood, catclaw and white-thorn acacia, and especially palo verde.

One of the smallest songbirds in North America, the Black-tailed Gnatcatcher is a denizen of the driest desert habitats and is usually found near patches of creosote. They are closely associated with native desert plants and are typically not seen in developed urban areas. Black-tailed Gnatcatchers are year-round residents of Southeast Arizona, defend their small territories throughout the year, and form life-long pairs, a rare strategy among songbirds. Nest building begins in late February and eggs are present in early March, with activity peaking in April. A compact, cup-shaped nest is usually placed low in trees and shrubs, often in a shaded fork. Once again, palo verdes are a preferred species with 55% of nests found, while mesquite make up another 10%.



CACTUS WREN AND CURVE-BILLED THRASHER

The largest wren in the US and Arizona's state bird, the Cactus Wren is at home in arid desert and grassland habitats. True to its name, it is most abundant where cholla and other cactus is predominant, including urban areas landscaped with cacti. Cactus Wrens remain in year-round pairs and often raise two to three broods in a year. Egg laying can begin in late February and varies with annual rainfall—the delay can be one or more months during dry years. They are also busy nest builders and can have as many as five used for roosting or decoys for predators. Their large globe nests are found in cholla 75% of the time, the next most in thorny trees including palo verde.

Unlike the other thrashers in Arizona, Curve-billed Thrashers actually thrive in urban areas. You likely have them in your yard if it is landscaped with cholla, but they are typically found in desert and grassland areas that contain cactus and thorny trees and shrubs. The nesting cycle of this species is also dependent on rainfall—in wet years, courtship could start in December with nest building in January. The bulky cup nest is found in cholla 90% of the time (mostly jumping and teddy bear). Should this bird be called "Cactus Thrasher?" A large portion of the remaining nests are found in thorny shrubs and trees, including palo verde, once again pointing to the importance of this species to many birds of the region.

NOT ALL GRASSES ARE FOOD

Native grasses are the vital food source for wintering Chestnut-collared Longspurs

Of all the bird surveys I plan and coordinate throughout the year, the winter grassland surveys focusing on Chestnut-collared Longspurs stand out as particularly meaningful. Grassland birds in general are declining and Chestnut-collared Longspurs specifically are the third fastest declining bird species in North America. This is likely due to habitat degradation or outright loss, both on their Great Plains breeding grounds and the Chihuahuan Desert Grassland where they winter. Of the species that nest in the Great Plains, 85% of them winter in Chihuahuan Desert Grassland, which is largely within Mexico but reaches southern Arizona, New Mexico, and west Texas.



Within these habitat types, Chestnut-collared Longspurs have specific requirements and the link between their survival and the plants present is strong. Many studies show a breeding habitat preference of native prairie that has been recently grazed, with minimal woody vegetation. On the wintering grounds they prefer shortgrass prairies and desert grasslands,

dominated by low grasses and forbs with most vegetation less than eight inches tall. Those are pretty specific habitat requirements!

Chestnut-collared Longspurs have declined by more than 87% since 1966, with an estimated 33% decline within 2003-2015. It has been listed as Near Threatened since 2004 on the International Union for Conservation of Nature (IUCN) Red List, and was elevated to Vulnerable status in 2018, which is one step below Endangered. Much of the prairie it needs to nest has been converted to croplands and urban areas, or has been otherwise fragmented by activities such as fracking, making what habitat remains less suitable. Essential wintering areas have also deteriorated, especially in Mexico where many formerly suitable wintering grasslands have been converted to irrigated agriculture. IUCN predicts that a decline in this species' population will continue into the future. National Audubon's large-scale climate change and associated habitat change prediction model shows likely additional pressure in the future with a decrease in suitable breeding and wintering habitat.

In 2019, Tucson Audubon intensified its efforts to monitor Chestnut-collared Longspurs and added several components to our long-running surveys. Two of the biggest changes were quantifying the properties of cattle tanks and ponds, and assessing the grass species present, wherever teams encountered groups of longspurs. Identifying grass species can be very challenging and Tucson Audubon staff and volunteers did a great job putting the time and effort into learning how to do these assessments. The winter diet of Chestnut-collared Longspurs is 100% seeds, so it is no surprise that the plant species present in a given area is a major predictor of where they are to be found. Non-native grasses are also a large factor, as invasives such as Lehmann's lovegrass are increasing, and spreading throughout the southwestern grasslands. Such invasives often push out native grasses, and provide very little to no suitable food for wintering birds. To the untrained eye, swaths of grassland can look the same across a landscape, but patches of non-native grasses



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that superficially look similar to native grasses will have fewer or even no seed-eating birds present. During surveys in Las Cienegas National Conservation Area and San Rafael Grasslands, Chestnut-collared Longspur detections were most often associated with patches of native grasses including grammas, dropseed, three-awn and cane beardgrass. Blue grama seems to be a special favorite, but has declined dramatically as abundance of non-native Lehmann's lovegrass has soared.

Cattle tanks and ponds are also very important resources for longspurs within their wintering grassland habitats. All birds that eat primarily seeds need to drink water multiple times a day to digest those seeds. Ponds and tanks are scattered throughout grazed lands to provide water for cattle, and have the dual benefit of serving native birds and other wildlife. Our surveys and audio data collected from Wildlife Acoustics Sound Recorders have shown that Chestnut-collared Longspurs preferentially use certain tanks over others. The "cattle tank assessment" component of our new survey methods have helped us to understand what properties their favorite tanks have in common. Our preliminary understanding is that their favorite tanks have few to no trees or shrubs within 50 feet of the tank, and water edges that are gentle, shallow slopes. This winter, exact degrees of slope will be documented for specific management recommendations to share with landowners and public lands management.

Modifying a cattle tank to better suit the needs of longspurs is far more achievable than reducing non-native grasses. Tucson Audubon staff have put considerable effort, time, and energy into battling non-native, invasive grasses throughout our region. It is a tiring and difficult battle that we are determined to continue, as increasing the abundance of native grasses and other plants is one of the most significant habitat improvements that benefits native birds, including the Chestnut-collared Longspur.

SPARROW-LIKE BUT NOT SPARROWS!

Even though they look quite similar to the many sparrow species that spend the winter in Southeast Arizona, Chestnut-collared Longspurs are not in the sparrow family. They are in the Calcariidae family which contains six species within three genera. Four of these species are longspurs and the other two are Snow Bunting and McKay's Bunting. All members of this family favor open habitats such as tundra or grasslands devoid of trees and spend much of their time on the ground. Due to their superficial resemblance to sparrows, they were long grouped into the Emberizidae family with true sparrows. They were moved to their own family when genetic studies showed that they were actually more closely related to new world warblers and cardinals than sparrows.



TOP: San Rafael Valley, Jennie MacFarland; LEFT: Chestnut-collared Longspur at tank, Alan Schmierer; RIGHT: Chestnut-collared Longspurs at Davis Pasture, Richard Fray

BIRDING BY HABITAT: USING PLANTS TO PREDICT THE BIRDS YOU'LL SEE

Native plants and native birds often have direct relationships, relying on one another to be successful. For plants, birds are the partners that spread their seeds to create future generations. For birds, native plants provide food, cover, and safety to raise their young. If you choose wisely, one large shrub or tree in your yard can provide everything a bird needs to be successful.

You can often predict what birds you're likely to see by studying their preferred habitat types and plants they utilize most often for food, nesting, and cover. Abert's Towhees are frequently found in riparian zones in the densest shrubs that have branches close to the ground. Similarly, Gambel's Quail are very conscious of danger from predators such as hawks and almost never stray far from thick cactus stands and dense shrubs such as saltbush. Fruit-loving birds like Phainopepla and Pyrrhuloxia favor desert hackberry and wolfberry not only for their berries but the excellent cover provided by their thorny branches.



Kim Matsushino
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Here are some of Southeast Arizona's common birds and what types of vegetation you're most likely to find them in.

Verdins are dependent on native trees like the palo verde for insect prey and as a site for both cover and nesting. Having suitable trees and shrubs is especially important for Verdins who build multiple orb shaped nests made of woven grass and stems for breeding and roosting throughout the year. Find Verdins in desert arroyos and shrublands with their nests on the branches of thorny shrubs and low trees like acacia, palo verde, and cholla cactus.

Pyrrhuloxia, a close relative of the Northern Cardinal but colored in gray and red, with a longer crest, and yellow, parrot-like bill can also be found in desert scrubland. They nest in mesquite, graythorn, elderberry, and palo verde. Unlike the Verdin's large, enclosed nests, Pyrrhuloxia nests are tidy cups fastened to the outer edges of the tree, away from the trunk and main branches.

In winter, Phainopeplas gather in areas of high mistletoe concentration, fiercely defending clumps of native mistletoe and its berries in palo verde and mesquite trees. Males and females each stake a claim to their own feeding territories. Phainopeplas may actually be one of the only birds in North America to nest first in one habitat and then again in another within the same year. In spring, these birds nest in Sonoran Desert habitat, often within a clump of mistletoe, ensuring a steady food supply. When temperatures begin to rise in early summer, these birds gather in nearby riparian woodlands or higher elevation oak woodlands, such as Madera Canyon, and may raise another brood.

Ground-nesting birds like Gambel's Quail and Lesser Nighthawk rely on thick, thorny bushes for cover and protection for nesting. Find quail seeking refuge, foraging, and nesting among desert hackberry, catclaw acacia, yuccas, and prickly pear. Lesser Nighthawks don't construct nests, rather, the female will lay eggs on the ground moving them to avoid the harsh summer sun. She relies on her camouflage for protection and the shade of overhanging bushes for cover.

Verdin and nest, Tom Brown; Phainopepla in hackberry, Dan Weisz; Gambel's Quail, Martin Molina



GREAT NATIVE PLANTS THAT PROVIDE RESOURCES FOR MANY OF OUR LOCAL BIRDS:

Fruits and berries, good for Northern Cardinal, Pyrrhuloxia, Phainopepla
 Wolfberry (*Lycium spp*)
 Desert Mistletoe (*Phoradendron californicum*)
 Netleaf hackberry (*Celtis reticulata*)
 Desert hackberry (*Celtis ehrenbergiana*)

Nuts and seeds, good for Abert's Towhee, Gambel's Quail, Lesser Goldfinch
 Fragrant beebush (*Aloysia gratissima*)
 Desert marigold (*Baileya multiradiata*)
 Catclaw acacia (*Acacia greggii*)
 Ironwood (*Olneya tesota*)
 Velvet mesquite (*Prosopis velutina*)
 Blue palo verde (*Parkinsonia florida*)



Tucson Audubon offers services that can help you create a healthy and sustainable habitat of plants that benefits birds and people. Contact Kari Hackney (khackney@tucsonaudubon.org) if you're interested or have questions.

A DELICIOUS PARTNER OWLS HELPING COMMU

Tucson Audubon advocates against the use of rodenticides as they often unintentionally harm other mammals, reptiles and birds of prey. Installing a nestbox to invite an owl or a kestrel to feed on mice is a great way to have chemical-free pest control. In 2019, Tucson Audubon was invited by the Vistoso Village Community in Oro Valley to install four screech-owl nestboxes in their small neighborhood to take care of the rampant rodent problem in a responsible way. Because Oro Valley is experiencing rapid development, cavity-bearing saguaros are becoming more difficult to come by in areas that otherwise have a good prey load. Screech-owls will use nestboxes for roosting throughout the year. In March through May they will nest, multiplying the number of prey they capture to keep up with the hungry owlets. Over the last two years we were able to confirm owls nesting in two of the four Vistoso Village boxes and roosting in all of them. Community members are already reporting a notable decrease in rodent numbers and a newfound love for these charismatic birds.

We were encouraged by the success of the Vistoso Village project. When the Community Gardens approached us for a collaborative project that would offer nesting habitat for owls and kestrels, as well as provide chemical-free pest control, we were all for it!

In October 2021, Tucson Audubon staff, along with volunteer Tim Helentjaris, visited each of the 21 Community Garden locations spread out across the Tucson valley. Each location was evaluated via satellite

imagery and on-site visits for habitat, car traffic proximity, and prey availability as we wanted to achieve the highest usage rate and ensure the safety and well-being of the species we were hoping to attract. We were able to install 17 nestboxes at 16 of the Community Gardens. While it may take some time for the boxes to become occupied, we will monitor each one in April of 2022 with a telescoping camera. Stay tuned for updates!

We commend Community Gardens of Tucson for their stance on chemical-free gardens that protects not only the gardeners but also pollinators and other wildlife. During installation of the nestboxes we often witnessed the gardens being visited by birds, native bees, butterflies and moths. We were also accompanied by American Kestrels not far from where we were installing the nestboxes. We hoped they took note of the newly available housing in the area and moved in soon!

To get more information on how to get involved in a garden near you, visit COMMUNITYGARDENSOFTUCSON.ORG.

To look into an owl box for your own yard, please visit: TUCSONAUDUBON.ORG/NESTBOX.

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SHIP: NITY GARDENS



Western Screech-Owl, Dan Weisz; BELOW: Screech-owl nestbox installations at various sites



COMMUNITY GARDENS OF TUCSON

For more than 30 years, Community Gardens of Tucson (CGT) has provided opportunities for Tucsonans to grow, harvest and prepare fresh nutritious food for the table. We are committed to gardening that is equitable, inclusive, and accessible to all people regardless of race, color, ethnicity, national origin, religion, sexual orientation, gender identity, family status, or ability. By creating shared experiences in our 21 gardens, we bring enjoyment, friendships and a greater sense of community that helps to address food insecurity for many of our residents.

This past summer, several of our community gardens were overrun with ground squirrels and other small mammals whose insatiable appetites were devastating many of our gardeners' leafy plants, vegetables, and other crops. Because CGT strictly prohibits the use of rodenticides and other chemical inputs, we turned to our friends at Tucson Audubon Society (TAS) to evaluate the use of owl nestboxes as a sustainable and ecologically responsible means for trying to control and manage rodents at our gardens. Tapping into TAS's expertise, we initiated, funded, and successfully completed a project to install 17 screech-owl nestboxes at 16 of our gardens.

Although it remains to be seen how many boxes will be used this spring and whether there will be a reduction in our unwanted rodent guests, CGT's garden Site Coordinators, staff and Board are all thrilled with our collaboration and partnership with TAS and the promise the project holds for addressing a serious problem in an ecologically sound manner.

Scott Feierabend, Board Treasurer
Community Gardens of Tucson
communitygardensoftucson.org



FRESH RECIPES *for* BIRD HABITAT

They're here! Five new "recipe cards," with ingredients and instructions on how to create beneficial urban habitat for birds and wildlife, can be picked up at our Nature Shop today.

LUCY'S WARBLERS

POLLINATORS: NATIVE BEES AND BUTTERFLIES

CREATURES OF THE NIGHT: ELF OWLS, BATS, AND NIGHTHAWKS

GREATER ROADRUNNERS

CRESTED CUTIES: NORTHERN CARDINAL, PHAINOPEPLA, PYRRHULOXIA



Kim Matsushino
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These new cards expand the series and join our original recipes: Hummingbirds, Desert Finches, Tiny Raptors, Cholla Dwellers, and Gambel's Quail.

Sharing information with a general audience on the relatively technical topic of creating bird friendly habitat is challenging. Most birders already understand how impactful their efforts can be and are very interested in attracting birds to their yard. But most residents of Southeast Arizona are not birders and need foundational information on why they should share their yards with native birds and pollinators. Our recipe cards have been a powerful tool in our efforts to communicate with new audiences. Since 2015, Tucson Audubon has given away more than 56,000 of the

first five cards for free to the public, mostly at events for the general public, such as home shows. As public events hopefully start up again in 2022, it will be great to have all ten cards to give people the knowledge and encouragement needed to create their own patch of urban habitat. Together we can create better habitat for native birds, pollinators, and other wildlife in urban areas of Southeast Arizona.

If you would like any or all of the ten recipe cards, stop by the Tucson Audubon Nature Shop at 300 E. University Blvd #120, Tuesday–Saturday.

Learn more about creating your own beneficial landscapes through our Habitat at Home Program at [TUCSONAUDUBON.ORG/HABITAT](https://tucsonaudubon.org/habitat).

GREATER ROADRUNNERS

YOUR YARD IS A GOOD PLACE FOR GREATER ROADRUNNERS!

- **ICONIC AND FASCINATING:** These symbols of the desert are exciting to see up close.
- **AMAZING HUNTERS:** They eat lizards, large insects such as grasshoppers, and rodents.
- **MODERN DINOSAURS:** They safely hunt rattlesnakes and eat venomous scorpions.
- **LARGER DESERT HABITAT:** Multiple yards with native plants are needed to support a roadrunner family.

ROADRUNNERS LOVE LIZARDS

- Lizards love the desert and roadrunners need lots of lizards to thrive and feed chicks.
- Lizards need lots of insects. Avoid spraying pesticides and let the lizards eat the insects for you!
- Lizards need places to hide. Brush piles and rock piles, especially at the bases of trees, can help keep them safe.
- Do you see any of these lizards in your yard? Having lots of lizards and dense cover plants is the best way to get roadrunners in your yard.

LUCY'S WARBLERS

YOUR YARD IS A GOOD PLACE FOR LUCY'S WARBLERS!

- **SWEET SINGERS:** Melodic song of the males is the first sign.
- **BUG SNACKS:** They eat lots of small insects.
- **YOUR YARD CAN HELP:** They can raise a family in a single many native plants.
- **DESERT ADAPTED:** The only warbler to nest in arid Sonoran Desert.

LUCY'S WARBLERS LOVE NATIVE MESQUITE TREES

Many mesquite trees in urban areas are from South America. velvet mesquite trees provide more food, are less likely to fall a monsoon storm, and don't buckle up sidewalks and pavement-native trees. They are by far the best choice!

Look at the leaves to see if your mesquite tree is a native tree what to look for:

NATIVE TREES

- Velvet mesquite
- Honey mesquite

NON-NATIVE TREES

- Chilean mesquite
- Argentine mesquite

CRESTED CUTIES: NORTHERN CARDINAL, PHAINOPEPLA, PYRRHULOXIA

YOUR YARD IS A GOOD PLACE FOR CARDINALS, PYRRHULOXIAS, AND PHAINOPEPLAS!

- **LOCALS:** All three species love habitat with native plants
- **CLASSICS:** Iconic birds of the desert southwest
- **TONGUE TWISTER:** Pronounced "Pyro-locks-ee-ah" and "Fain-oh-pep-la"

MISTLETOE IS FOR THE BIRDS!

- Not so bad: It's a native plant and a natural part of the ecosystem.
- Only partially parasitic, mistletoe takes very little from the tree.
- Mistletoe provides food and nesting opportunities for Phainopepla.
- Phainopeplas rely on mistletoe berries, and it is an important food source for many birds when other native fruit is scarce.
- Mistletoe provides night-time protection for quail and other birds.
- It cannot be bought at nurseries. You're lucky to have it!

POLLINATORS

YOUR YARD IS A GOOD PLACE FOR POLLINATORS!

- **DIVERSE GROUP:** Pollinators include birds, bees, bats, beetles, butterflies, moths, wasps and flies. They all move pollen between flowers.
- **TEAM WORK:** You can help pollinators survive and thrive with nectar plants for adults and food plants for caterpillars.
- **VITAL:** Pollinators help many of our native plants create seeds.
- **COMPACT:** Very little space is needed to make a huge positive impact.

DESERT BROOM IS GREAT!

Pollinators love nectar and desert broom is a hardy native plant that provides huge amounts of nectar and requires very little water. Often maligned, this plant actually doesn't cause allergies and you can avoid their fluffy seeds by planting a male plant which still provides nectar for pollinators. Desert broom is a champion plant for pollinators.

AMAZING NATIVE BEES

There are over 1,000 species of native bee in the Sonoran Desert. They are mostly stingless, gentle and don't live in hives like the introduced European honey bee. Each female individually lays her eggs with food for the growing babies in a tunnel dug into the ground or wood. Native solitary bees pollinate many of our native plants and may visit your yard.

CREATURES OF THE NIGHT: ELF OWLS, BATS, NIGHTHAWKS

YOUR YARD IS A GOOD PLACE FOR NIGHT-TIME INSECT EATERS!

- **BUG SNACKS:** Birds, bats, and other insect eaters will keep the insect numbers down in your yard.
- **URBAN ADVANTAGE:** Nearby streetlights attract a wide variety of insects that then attract bats and nighthawks.
- **SMALLEST OWL:** A large saguaro with a nesting cavity may become a home for an Elf Owl.
- **FUN AFTER DARK:** You can experience the fascinating animals that live in the night.

LET'S GO BATTY!

- Bat boxes specially designed for desert climate provide shelter for sleeping bats during the day.
- Both the Rocket Box and 4-Chamber Nursery designs work well in the Sonoran Desert and can be purchased at the Tucson Audubon Nature Shop.
- Avoid insecticide use. Bats will eat insects for you!
- Check out bridges at dusk during spring and summer for bats leaving to hunt insects.

HUMMINGBIRDS AND NECTAR SOURCE PREFERENCES IN SAGUARO NATIONAL PARK



Canyon morning glory; Trans Pecos morning glory, Viridiana Orna; Rufous Hummingbird, Alan Schmierer

Southeast Arizona has an amazing diversity of 15 hummingbird species, which makes it one of the best places in the US to see these tiny, colorful birds. Local hummingbird species include Anna's, Broad-billed, Black-chinned, and Rufous—we are very fortunate that a few of these hummingbirds can be seen year-round here.

Unfortunately, hummingbirds appear to be declining both world-wide and in Arizona. For example, the Rufous Hummingbird population has declined by half over the past 50 years. Little is known about why these birds are losing ground, but it is believed that climatic warming trends are changing spring flowering dates in ways that could impact migratory hummingbirds. The Western Hummingbird Partnership has identified a lack of knowledge about what flowers hummingbirds prefer, and the phenology of these flowers, as barriers to conserving migrant hummingbirds along their journeys.

To help fill this information gap Saguaro National Park is examining the flowering phenology and nectar source preferences of resident and migratory hummingbirds in the park with a focus on the migrant Rufous Hummingbird. In fall 2021, we recorded foraging observations and noted the abundance and flowering stage of the focal plant species. Our results suggest that the preferred nectar source for most hummingbirds, including Rufous, was the Trans-Pecos morning glory, *Ipomoea cristulata*. This species is a bright red/orange, trumpet-shaped flower whose characteristics are typically associated with hummingbirds. The second most popular flower, but preferred far less, was the blue to light rosy-purple or white Canyon morning glory, *Ipomoea barbatipes*. Although it's not considered

a typical "hummingbird flower", atypical flowers can be as profitable as the typical ones, supporting up to 24 hours of a hummingbird's metabolic requirements through its migration. Both morning glories are native annual vines commonly found in the park's riparian areas and were extremely abundant during this year's very rainy summer.

Hummingbirds are extremely difficult to monitor compared to other birds because they don't sing, are very cryptic, and are hard to identify to species, especially for females. Results from this study will help us learn more about the structure of Rufous Hummingbird populations and the nectar sources preferred by both resident and migratory populations. This project not only raises awareness about this watchlist species and other hummingbirds in the Sonoran Desert but is also helpful for promoting pollinator gardens and restoration projects on public and private lands. For example, Saguaro National Park is already using the results of this study to collect seeds of both morning glories for distribution in various projects, and we hope to continue sampling during the spring migration season in 2022. Through this study we will gain a better understanding of the plants that support migratory hummingbirds through their journeys, which will aid in their long-term conservation.



Viridiana Orna is a National Park Service and Environment for the Americas intern in the Mosaics in Science diversity internship program and a biological monitoring assistant at Saguaro National Park.



Photos by Lynn Hassler

DESERT WILLOW

SCIENTIFIC NAME:

Chilopsis linearis

FAMILY: Bignoniaceae (Bignonia)

NATIVE RANGE: Western Texas to southern Nevada, Arizona, southern California, and northern Mexico; along dry washes between 1500' and 5000' elevation

WILDLIFE VALUE: Offers cover, shelter, and nesting sites for birds; flowers attract many pollinating insects as well as hummingbirds, orioles, Verdins, and House Finches; food plant for Rustic Sphinx moth



Lynn Hassler
Green Gardeners Volunteer Captain,
Historic Y

Desert willow is not a true willow, though its long thin, down-hanging leaves make it look like one. With extensive root systems that seek out water and waxy leaf coatings that prevent moisture loss, desert willow survives where true willows cannot. If summer temperatures get too high and summer drought extends too long, the plant drops its leaves and becomes dormant.

The typical mature size for this large shrub or small tree is 20' high x 15' wide. Left to its own devices, it prefers to develop into a shrubby form, sending up multiple suckers from the base of the trunk. Prune occasionally for a neater appearance; or prune more heavily to achieve tree form. Once established, desert willow can survive on rainfall alone, but supplemental water 2–3 times a month in summer will keep flowers and foliage more attractive. Plants do well in most soil types and are hardy to 10 degrees, but new growth may be susceptible to frost so discontinue supplemental irrigation by early fall. Plant in full sun on a south or west orientation to shade your house or patio. Foliage drops in winter, so you'll still be able to enjoy the sun's warming rays during that season.

Plant some evergreens alongside to draw attention from the bare winter branches. The dried seed pods (8" long that turn tan with age) hang on through the winter and without leaves, plants can look downright

shabby. Seeds do provide food for birds and small mammals, but if you can't stand the scraggly appearance, you can cut them off. Grouping several plants together can provide an informal hedge for visual screening or blocking the wind.

In spring and summer, this plant really shines with its graceful willowy shape and long-lasting bloom. Pink to lavender, trumpet-shaped flowers bloom April–September, and are sweet smelling, attracting many insects. Large black carpenter bees are important pollinators. Hummingbirds, Verdins, orioles, and House Finches seek out the blossoms as well. And, of course, the plant is important for providing shelter and nesting sites for many other species of birds.

Of particular interest on my desert willow this fall were scores of chunky green Rustic Sphinx Moth caterpillars (*Manduca rustica*). They are sometimes called hornworms because of the stiff pointy horns on their rear ends and are an excellent food source for hungry roadrunners. On several occasions, I was treated to some rather dramatic spectacles: a family of roadrunners descending upon my desert willow, maneuvering their way through the vegetation to pry the caterpillars from the branches; no easy task. They then slammed the caterpillars against a rock or the ground, beating the tasty prey into submission, after which they were quickly consumed.

A REVOLUTION IN FINDING RARITIES—THE 1970S

Many young and new birders take for granted that birding in Arizona has always been like it is today. They search for rarities in likely patches of good habitat, at the right time of year, knowing what to expect, and easily document the finds with the internet, cell phones, and digital photography!

Using eBird has certainly made birding easier! Back in the early 1970s, this was not the case. Sure, there was the scholarly *Birds of Arizona* published in 1964 by Alan Phillips, Gale Monson, and Joe Marshall. This gave birders an excellent idea of where birds were found in the state, but birding was less data-driven, and more casual, and mostly consisted of Audubon Society field trips, or Christmas Bird Counts. Most of the early rare birds in the state were found by ornithologists and documented by collecting the bird for the scientific record.

Along with Gale Monson, birders such as Bob and Janet Witzeman in Phoenix, Bill Harrison in Nogales, and ornithologists such as Russell Balda in Flagstaff, and Stephen Russell in Tucson, were just starting to figure out how and where to look for rare birds in the state. Their efforts were somewhat passive though, going to nice habitat and lucking into a rare bird. These early pioneers got the ball rolling, and they understood that rare birds were showing up in the state, so they formed the Arizona Bird Committee in 1973 to evaluate the growing numbers of rare birds being found.

It was around this time when several young birders/biologists arrived on the scene in Arizona, many of whom have gone onto careers in ornithology—well-known names such as the late Ted Parker, Kenn Kaufman, Doug Stotz, Mark Robbins, Ken and Gary Rosenberg, and Scott Terrill, to name

a few. As a result of their arrival, and with birding (in general) becoming a much more popular hobby in the early to mid-1970s, the number of new discoveries began to increase exponentially.

Birders began exploring more interesting areas in the state. For example, Ted Parker went to Guadalupe Canyon in the extreme southeast corner of Arizona, and discovered breeding Lucifer Hummingbirds, a species barely known from the state at the time. Kenn Kaufman, along with the Witzemans, rediscovered Veery breeding along the South Fork of the Little Colorado River near Springerville after a 39 year hiatus! Bob Witzeman combined a love of shorebirds with an interest in photography, and he was the first to document Arizona's first Wandering Tattler and Sharp-tailed Sandpiper. As was the case in California during this same time, birders in Arizona discovered “oasis” birding in places such as Apache and Navajo counties, and the sheer number of rarities found during the mid-late 1970s was impressive. We made a concerted effort to photograph as many as possible, earning the respect of Gale Monson, who included many in his *Annotated Checklist of the Birds of Arizona*, published in 1981.

Birding in Arizona changed from specimen-based ornithology to documentation-oriented birding with cameras and recorders. It was this new crop of birders who paved the way for what we know today in terms of searching for and documenting rare birds in Arizona. Most of these early “pioneers” were regional editors for *American Birds* and *North American Birds*, and served on the Arizona Bird Committee, and all have contributed greatly to our knowledge of Arizona birds.



Gary Rosenberg is Secretary of the Arizona Bird Committee and co-author of the season bar graphs section of *Finding Birds in Southeast Arizona*.



DUCKS

OF SOUTHEAST ARIZONA

Very few bird families are as ubiquitous, widespread, or beloved as ducks. Visit any pond, lake or river, pretty much anywhere in the world, and you'll find some. They are big, brightly-colored, cheerful birds, often allowing close approach in urban situations. This makes ducks a great starting point for kids and the general public to encounter and appreciate birds. Ducks have made their way into popular culture around the world. In the part of England I grew up in, there's a very localized, affectionate greeting, one my grandma always used: "Aye up, mi duck!"

Ducks can be especially useful for beginner birders to learn the basics of bird identification. They're easy to find, and reliably present in the right season. You don't even need binoculars to get excellent close views in some urban parks, and figuring out the species (of the males) is fairly easy. Female ducks, and males not in their "full plumage" (we'll come back to that) are more challenging to identify, so there's something for everyone.

Winter is the time to enjoy ducks in Southeast Arizona, with 15+ regular wintering species, out of more than 30 that have been recorded in total. While we often get one or two summer stragglers—a Northern Shoveler here, a Redhead there—just three species are regular breeders: Ruddy Duck, Mexican Duck, and Black-bellied Whistling-Duck. The first returning "winter" migrants can be as early as mid-August. Numbers build through the fall, and the midwinter months offer peak viewing.

Winter is also the best time to see ducks looking their finest. Bird molt is a complicated subject, and duck molt is especially difficult. To clumsily boil it down to one sentence, unlike almost all other birds, the "breeding plumage" of male ducks is drabber, and they adopt a brighter plumage in winter. Females retain a cryptic plumage year-round.

We have several convenient places to experience ducks. Many city parks have ponds that can be attractive, the most notable being Reid, Christopher Columbus, and Fort Lowell. Sweetwater Wetlands is another hot-spot, and the flowing sections of the Santa Cruz River have possibilities. Heading south, Canoa Ranch, Amado WTP, and Patagonia Lake are guaranteed sites for winter ducks, while a trip to famous waterfowl stopovers such as Willcox Twin Lakes and Whitewater Draw will be equally productive. At the latter few sites, a spotting scope will be useful.

You'll find different duck species at different sites, due to feeding techniques that require slightly different habitats. "Diving ducks" need deeper water where they dive fully underwater to chase fish and small aquatic creatures. "Dabbling ducks" can be found pecking at the surface for insects, grazing on short grass, or up-ending in shallow water (sticking their butts out!) to nibble on aquatic vegetation.

So what's the magic to identifying those tricky female ducks? Unfortunately, as with all birds, there's no way to bypass the hard work and repetition, but there is one quick cheat for beginners. This may sound a little facetious, but my advice is to look at the one it's next to! Generally, ducks hang around in pairs or groups of the same species, even if they're within a larger mixed flock. Take a moment to discover which birds your mystery duck is interacting with, and there's a good chance you'll start to notice the same size, shape, and behavior as the easily identified males.



Based in Rio Rico, Richard Fray has lived in Southeast Arizona for almost 20 years. He is a regular volunteer and past board member of Tucson Audubon Society, and a professional birding guide/tour leader for his own company, Fun Birding Tours (arizonabirder.com).



**CINNAMON TEAL**

We get three teal species, with Green-winged and Blue-winged also possible. Males distinctive. Look for subtle differences in shape, bill length, and head pattern in females.

**NORTHERN SHOVELER**

A large dabbling duck, often in big flocks at open water sites. That HUGE bill should always be a giveaway. They sometimes feed in tight, whirling groups.

**GADWALL**

Often dismissed as the boring, gray duck, but look closely and you will find delicate scalloping and subtle beauty. The thin, orange-sided bill of the female stands out.

**AMERICAN WIGEON**

Often in large flocks, feeding along shorelines or grazing on golf courses. The males have a distinctive, whistled call. Females are quite orange overall. Surprisingly long tail.

**MALLARD**

The classic puddle duck around much of the world. Fairly large, the males have a distinctive green head, while females are very similar to Mexican Duck. Beware Mexican Duck hybrids!

**MEXICAN DUCK**

Both male and female look similar to female Mallard. Males have a yellow bill, females an orange bill with dark smudges. More wary than Mallard; prefers smaller ponds and streams.

**NORTHERN PINTAIL**

A large, slim, elegant duck with a long neck. Males are unmistakable. Females are subtle, but a more buffy color than other ducks with a plain face and long, gray bill.

**CANVASBACK**

A large, low-slung diving duck, similar in plumage to Redhead but with a dramatically sloping forehead and long, pointed, black bill. The body color of males is almost whitish.

**REDHEAD**

Sits higher out of the water than Canvasback. More rounded head, paler, gray or bluish bill with a dark tip and pale band. Males have darker gray bodies than Canvasback.

**RING-NECKED DUCK**

Everyone knows this should be called Ring-billed Duck! Males have a black back and distinctive white spur on the breast side. Females have a pale eye ring and patterned bill.

**LESSER SCAUP**

Similar to Ring-necked, with which it often associates. Males have white sides and scalloped, gray backs. Females have a bold white flash at the bill base, and lack pale eye rings.

**RUDDY DUCK**

Small, compact, diving ducks in the "stiff-tail" group, often with their tails sticking up distinctively. Males have a dark cap and obvious white cheek, while females have striped heads.

THE FEEDING STATION ALL AROUND US



Lazuli Bunting, Frederick L Mitchell Jr; Monarch butterfly, Ned Harris; Desert honeysuckle, Alan Schmierer

“The Violet-crowned is over on Feeder 4.”
“OOH, there’s a tanager above the suet on the pecan tree!”

The history of the Paton Center as a birding destination has been driven heavily by the copious number of bird feeders on site, originally for Wally and Marion’s personal enjoyment. Mix the easy access, high-calorie food provided in nearly endless supply for multiple decades with the huge number of local species and a birding hotspot was nearly inevitable.

We still provide significant amounts of food for birds throughout the year: roughly \$3,000 worth of oranges, suet, peanut butter, nyjer, mixed seed, and gallons upon gallons of nectar. In addition to all the commercial food provided, we’ve drastically increased the amount of wild foods available. We seek to work with plant species that support a wide variety of birds and wildlife as well as specific target species that need certain foods.

- The natural corner patch of hummingbird favorite desert honeysuckle has been extended along much of the back fence line.
- The former Bermudagrass horse paddock is now a meadow with an incredible diversity of nectar-heavy flowers for pollinators and also laden with seed for finches, buntings, and sparrows.
- The Monarch Waystation and meadow have hundreds of milkweeds, the larval food for monarch and queen butterflies.

In addition to these direct trophic, or food chain, based strategies of growing the plants that provide food for species, we also plan and approach things at a secondary level. The vast majority of birds rely heavily on insect prey to feed their growing young. To ensure there are lots of tasty insects

around, we intentionally keep our grasses taller, our wild areas more dense and diverse, and harvest as much rain on site as possible. These efforts increase ambient humidity and provide cover and food for the wide variety of tasty protein snacks that little birds need to grow.

- We’ve planted over 50 Arizona walnut trees in the adjacent Cuckoo Corridor. Tent caterpillars love walnut leaves and cuckoos love tent caterpillars—it’s a case of growing the food of the food.

The preferred foods of some bird species are difficult to source. Montezuma Quail, historically seen just off-site, primarily prefer acorns, wood sorrel tubers, nutsedge tubers, and tepary beans. We’ve planted one oak tree on site (we may get acorns in 20 more years...). Native wood sorrel and nutsedge, which grow nearby, can’t be bought, so we’re taking the initiative to grow them out! Tucson Audubon was recently awarded funding from the Coronado National Forest to source and grow these species in a joint project with University of Arizona, Borderlands Restoration, Southern Arizona Quail Forever, Arizona Quail Alliance, and others! The link between birds and plants at the Paton Center will grow even stronger!



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



CASSIN'S KINGBIRD

They're called *Tyrant* Flycatchers for a reason. It is the kingbirds, the large, bold, conspicuous, treetop-perching flycatchers of the genus *Tyrannus* that inspired the modifier in the family name. It's hard to imagine anyone referring to any of the smaller drabber flycatcher species, say, a skulking Dusky Flycatcher, as a tyrant. But watch any kingbird launch from an exposed high perch to dive bomb a Red-tailed Hawk passing through its territory and you'll realize that this is a bird that fancies itself the ruler of its domain.

Four species of kingbirds grace the open and semi-open habitats of Southeast Arizona during the summer, but most leave to spend the winter further south. First to depart are the Tropical and Thick-billed Kingbirds, species which have a firm but limited foothold north of the Mexican border. Virtually all of the state's Western Kingbirds leave next.

The Cassin's Kingbird, the hardiest member of the group, is the last to leave, but not quite all of them do. A few individuals linger late into the fall and some even overwinter, and the number doing so has been on the increase in recent years. Most Cassin's Kingbirds seen in Southeast Arizona during the winter months are loners, often found sticking it out in some seldom-birded patch of suitable habitat during a Christmas Bird Count.

Fiercely territorial when nesting, many kingbirds put their breeding season animosity behind them to form large boisterous flocks in the winter, a spectacle seldom seen in North America. But in two of the last three winters, birders in Patagonia have been able to get a taste of this

phenomenon, as a flock of Cassin's Kingbirds sometimes numbering in the dozens has been converging early each evening in the town park along the highway (first noted in the winter of 2019–20 and again as this is being written in December 2021).

When a flock of Cassin's Kingbirds is present, it is hard to miss, on account of their loud, low-pitched, burry calls often transcribed as "chi-beer" or "come here". It is these shouting calls that lend the second part to the species' scientific name *Tyrannus vociferans*.

As if the sight of multiple bright yellow-bellied, smoky-gray cowed Cassin's Kingbirds in the middle of the winter didn't induce enough joy, increased scrutiny of the town park brought on by their presence has produced sightings of other notable species loosely associating with them, including American and Rufous-backed Robins and even a Rose-throated Becard.

If you're passing through the town of Patagonia in the winter, you might brighten your day by stopping to give a look and a listen for Cassin's Kingbirds, the "shouting tyrant" of southeast Arizona.

Louie Dombroski
Paton Center Birder-In-Residence



Cassin's Kingbird, Dorothy Sutherland

BIRDATHON 2022

APRIL 8 to MAY 8

The 2022 Birdathon is your chance to enjoy birds while raising critical funds to support the mission of Tucson Audubon. It's fun and easy to participate—visit TUCSONAUDUBON.ORG/BIRDATHON to get started or contact Luke Safford at lsafford@tucsonaudubon.org.

WHO? You! Absolutely anybody can participate in this tradition begun in 1987. You can:

- Form Your Own Team
- Donate to a Team

WHEN? April 8 to May 8. You make the call: Take 24 hours, half a day, a week, or the whole month!

WHERE? Take your birding anywhere on the planet you like.

PRIZES? Yes! We're continuing our COMPETITION CATEGORIES and jazzing up our pool of prizes.

WHY? Birdathon is a great way to have fun with friends and family, spotting birds while helping with this community fundraiser to support Tucson Audubon.

NEVER DONE A BIRDATHON OR WANT NEW IDEAS TO MAKE YOUR BIRDATHON THE BEST YET? ATTEND A WORKSHOP!

Tuesday, March 8, 11 am–12 pm AND Monday, April 4, 7–8 pm

Virtual Workshop: Making Your Birdathon the Best | Host: Luke Safford

Join Luke Safford as he'll share his Birdathon tips and stories, help you develop some creative ideas, and answer any questions you might have as you get started on your FUN Birdathon adventure.



TUCSONAUDUBON.ORG/BIRDATHON

Greater Roadrunner, Mick Thompson

INCLUSIVE AND WELCOMING OUTDOORS PROGRAMS

The outdoors community is diverse, but not truly *inclusive*, because not everyone feels heard or seen. Inclusion is a system where everyone feels comfortable, heard, and seen; an environment where diversity is expressed and accepted, not just present for a photo. Often, when people don't see themselves represented in some activities or areas of life, it's difficult for them to have a model to inspire, follow or learn from. Here are a few things to consider when trying to create more inclusive and welcoming outdoors programs:

- Be authentic in your actions, words, and even in your mistakes. Educate yourself, work on your own self-transformation. Be curious and aware of issues affecting local communities. Keep in mind that people live different realities and see the world through different lenses.
- Welcome people as their own selves. Make people feel they *belong* in your group instead of making them feel like they have to *fit in*—it should be your effort, not theirs. Don't patronize or condescend. Acknowledge their humanity, their background, disability, physical shape.
- We all have been new to something: school, work, travel, etc. As an outdoors leader, you must relate to new participants in their limited experience or comfort level, instead of them relating to your 'expertise.' Share experiences, stories, opportunities that allow people to see

themselves as new participants, not as 'experts.' Don't expect people to wear technical clothing or gear; accept them showing up as they are. Same for food, transportation, footwear, etc.

There is no formula to attract diverse participants in outdoor programs, only your authentic interest and willingness to build trust and make others comfortable, even when you might be a little uncomfortable. Consistent engagement and inclusion of diverse communities will reflect in retention and program growth.



Sergio Avila is a wildlife biologist and conservationist, an immigrant, and a trail runner living in ancestral Tohono O'odham and Pascua Yaqui Lands since 2004. He works as Local Outdoors Program Coordinator with the Sierra Club. He can be found on Twitter and Instagram @Sergio_concolor or running through the Sonoran Desert around Tucson.

The original, long format version of this article was first published in the Fall 2021 issue of Canyon Echo, a newsletter produced by the Sierra Club Grand Canyon Chapter.

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Let Tucson Audubon help you create sustainable, great-looking spaces for birds and other wildlife. Join our Habitat at Home program and learn how today!

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TUCSONAUDUBON.ORG/ALLIANCE

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MOWGLIEXPEDITIONS.COM

BIRDING TRIP TO COLOMBIA

April 19–28, 2022

\$3350 per person (twin sharing)

Colombia is one of the best birding destinations in the world, having more species than any other country (about 1,950). Today, Colombia is very safe, especially the places and lodges we'll be visiting. The Colombians are a warm and friendly people and the country has a charm not many others have.

BIRDING TRIP TO BELIZE

March 5–14, 2022

Trip II: March 19–28, 2022

\$3350 per person (twin sharing)

Belize, the only English-speaking country in Central America, has long enjoyed a reputation for unsurpassed natural beauty, and has 570 bird species documented. Two-thirds of Belize is covered in tropical forest, half of which is old growth, and home to howler monkeys, tapirs, anteaters, and the occasional lurking jaguar.

SABREWING NATURE TOURS

SABREWINGTOURS.COM

COSTA RICA: RAPTOR MIGRATION SPECTACULAR

October 16–25, 2022

\$4,099 Double Occupancy

Join us as we visit the amazing site of Kèkòldi where millions of raptors pass overhead each autumn. Thousands of Broad-winged and Swainson's Hawks pass by this site, and we'll find many other raptors in the mix. We'll also bird at Rancho Naturalista and Arenal Observatory Lodge during this tour!

ECUADOR: EXPLORING THE NORTHERN ANDES

September 10–23, 2022

\$6,399

Ecuador has long been considered one of the best birding destinations in the world, and once you're there, you'll understand why! On this exciting tour, we'll visit a wide variety of habitats as we travel from elevations of 14,000 feet at Papallacta Pass down to 1,000 feet at Silanche Reserve!

WILDSIDE NATURE TOURS

WILDSIDENATURETOURS.COM

AMAZON RIVERBOAT ADVENTURE

February 25–March 5, 2023

From \$5950 per person

Birding, photography, fun and relaxation, all from our 150 foot deluxe Amazon riverboat! You'll have a host of leaders for your Amazon adventure: birding guides, nature photographers, and local naturalists. We'll enjoy multiple excursions by motorized skiff each day, designed to reveal the incredible wildlife of sloths, monkeys, pink dolphins and so many birds!

BELIZE: INTRODUCTION TO BIRDING THE TROPICS

8-Day & 10-Day tours in 2022/2023

From \$2700 per person

Belize is the best location to begin your tropical birding travels! Only a few hours from the USA, Belize is home to over 600 species of birds. Easy trails, comfortable climate, and easy access to great birding locations make Belize a very special place to learn the tropical bird families!

BIRDING EXCURSION WITH TUCSON AUDUBON

SOUTH AFRICA BIRDING AND WILDLIFE SAFARI, IN PARTNERSHIP WITH BIRDING ECOTOURS

KRUGER NATIONAL PARK AND AREA

October 1–10, 2022

R77,500 per person (shared room);

R8,100 for single supplement

PRE-TRIP: CAPE TOWN AND PELAGIC

September 24–October 1, 2022

R55,915 per person (shared room);

R6,145 for single supplement

Prices in South African rand

Join Luke Safford and local experts on a wonderful trip to South Africa!

We'll spend 10 days in one of South Africa's richest areas for birds, mammals and other wildlife. The massive Kruger National Park is teeming with Africa's mammals, including African Elephant, Giraffe, Zebra, Lion, Leopard, Cheetah and many more. For birders, the park is full of easy to see, spectacular-looking species, such as rollers, bee-eaters, kingfishers, hornbills, vultures, owls, storks, the spectacular and colorful Bateleur, Secretarybird, Kori Bustard, and Southern Ground Hornbill. This will be an adventure you will never forget! Add on the Cape Town and Pelagic pre-trip to make the most of your experience!

SEE DETAILS AND REGISTER AT TUCSONAUDUBON.ORG/EXCURSIONS



Bateleur, Bernard Dupont.

BIRD-SAFE BUILDINGS PROGRAM VOLUNTEERS MAKE PILOT YEAR A SUCCESS

Tucson Audubon launched a new program this year to continue our efforts in reducing hazards to birds. The Bird-safe Buildings program (BSB) tackles the issue of window collisions that kills close to a billion birds in North America every year. Our plan includes combating window strikes in residential buildings as well as commercial high-rises.

We have two groups of volunteers helping with the two very important aspects of the program. One group assembles free outreach kits, including an information brochure, window decals, and a program recognition decal. It may not be glamorous, but it is extremely valuable work. The kits provide a free way to prevent window strikes in local homes. We also distribute these at key locations, such as Tucson Wildlife Center, bird feed stores, as well as public events. With the help of our volunteers, we have now created and distributed close to 1,000 free kits!

The other group of BSB volunteers does monitoring surveys to document any strikes near high-rise buildings in Tucson during peak migration periods in Arizona. They are out there day after day, early in the morning

looking for any dead or injured birds from the night before. Our volunteers not only collect important data to be used on the global scale, but they also rescue any injured birds that would otherwise succumb to their injuries. The collected data will be used to approach the building managers and encourage them to prevent window strikes by turning off building lights at night during peak migration. All injured birds are brought to the Tucson Wildlife Center for treatment. The dead birds serve a purpose too: They are donated to the Liberty Wildlife Non-Eagle Feather Repository, where the feathers will be used for Native American ceremonial needs.

The Bird-safe Building program wouldn't be the success it is without the hard work of our dedicated volunteer force. Thank you!

Olya Phillips
Community Science Coordinator
ophillips@tucsonaudubon.org



LEARN HOW TO LEAD BIRD WALKS!

Do you have a passion for sharing the love of birds with others? Have you ever wanted to lead a bird walk? We are excited to announce that this spring, Tucson Audubon will debut a new field trip leader training program! The program will offer participants comprehensive field training as well as the opportunity to shadow experienced leaders in the field. Graduates of the program will join our active group of current trip leaders and be equipped to lead their very own trips. If you're interested, stay tuned for updates or contact Community Engagement Coordinator, Kirsten Howe at khowe@tucsonaudubon.org.

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](https://tucsonaudubon.org/volunteer).



REGISTER ONLINE AND FIND DETAILS AT:
[TUCSONAUDUBON.ORG/NEWS-EVENTS](https://tucsonaudubon.org/news-events)

Tuesday, January 11, 11am–12pm

VIRTUAL PRESENTATION: INVITE CRESTED CUTIES TO YOUR YARD | Presenter: Jennie MacFarland

Northern Cardinals, Pyrrhuloxias and Phainopeplas are “Crested Cuties” and are among the most charming and noticeable birds in Southeast Arizona. We’ll discuss these charismatic birds, where they can be found, and how you can invite them to your yard.

Wednesday, January 19, 6–7pm

VIRTUAL PRESENTATION: MACRO TO MICRO-PHOTOGRAPHY WITH BRIDGE CAMERAS

Presenter: Simon Tolzmann

Good photos do not need to be taken with a \$10,000 camera setup. Using a point and shoot is a happy medium, and the capabilities never cease to impress. The secrets to micro to macro point-and-shoot photography are waiting to be shared.

Tuesday, January 25, 11am–12pm

VIRTUAL CLASS: BIRDING THE CALENDAR—WHERE TO GO BIRDING IN FEBRUARY & MARCH Instructor: Luke Safford

Registration fee: \$10/member, \$20/non-member

Why does this event cost money? Your support helps us continue to offer an exceptional array of field trips and programming for the community.

Wednesday, January 26, 11am–12pm

VIRTUAL EVENT: WELCOMING TUCSON AUDUBON’S NEW EXECUTIVE DIRECTOR | Hosts: Ethan Myerson and Luke Safford

We are excited to welcome Michael McDonald as our new Executive Director, and here is your opportunity to meet him! Michael will share a bit about his background and the direction of Tucson Audubon as an organization, and also answer some questions you may have for him.

Thursday, January 27, 5–9pm

IN-PERSON SOCIAL: BIRDS N’ BEER: FOR YOUNG BIRDERS (UNDER 50) | Host: Kirsten Howe

Join us for an evening of birds, beer, and fun with other young birders, as we bird Sabino Canyon followed by a drink at Three Canyon Beer and Wine Garden.

Monday, January 31, 7–8pm

VIRTUAL EVENT: BIRDS ‘N’ BEER—“RARE & INTERESTING BIRDS IN SE ARIZONA” | Host: Luke Safford

Thursday, February 3, 11am–12pm

VIRTUAL PRESENTATION: ATTRACT LUCY’S WARBLERS TO YOUR YARD USING OUR “RECIPE” | Presenter: Olya Phillips

We’ll share our findings on best practices to attract Lucy’s Warblers to your yard. Lucy’s Warblers are abundant in Tucson in spring and a little effort can make your yard a place where they can thrive and even nest.

Friday, February 11, 11am–12pm

VIRTUAL PRESENTATION: BIRDING IN ECUADOR with Conservation Advocate, David Robinson

Wednesday, February 16, 6–8pm

IN-PERSON WORKSHOP: EXPLORING YOUR BACKYARD BIRDS THROUGH DRAWING with Artist Trenton Jung

Saturday, February 19, 10am–2pm

IN-PERSON VOLUNTEER EVENT: BUFFLEGRASS PULL with Dillinger Brewing

Are you ready to help Save our Saguaros from wildfire? Here is an opportunity to take action by getting outside and removing buffleggrass with us. As a bonus you’ll receive a special discount when you visit Dillinger Brewing Company after the event.



Thursday, March 3, 11am–12pm

VIRTUAL WORKSHOP: BASICS OF BIRDING PHOTOGRAPHY Presenters: Tyler Ficker and Noah Buchanan

Tuesday, March 8, 11am–12pm AND Monday, April 4, 7-8pm

VIRTUAL WORKSHOP: MAKING YOUR BIRDATHON THE BEST | Host: Luke Safford

Our annual Birdathon is a great opportunity to enjoy birds while raising or donating critical funds for Tucson Audubon. Join Luke Safford as he’ll share his Birdathon tips and stories, help you develop some creative ideas, and answer any questions you might have as you get started on your Birdathon adventure.

Tuesday, March 15, 11am–12pm

VIRTUAL PRESENTATION: TAS HABITAT AT HOME RECIPE CARD: POLLINATORS

Presenters: Jennie MacFarland and Kim Matsushino

March 25, April 22, & May 20; 8–11am

THREE PART BEGINNING BIRDING WORKSHOP AT THE PATON CENTER FOR HUMMINGBIRDS

Leader: Luke Safford

Registration fee: \$125/member, \$175/non-member

Limited to 8 participants. Registration open in early February.

This three part workshop is meant for those of you who are just getting into birding and are eager to develop your birdwatching skills and knowledge in the field. We’ll cover topics like how to find birds, bird behavior, identifying birds by shape & voice, migration, and so much more. The entire workshop will be conducted outside while we are birding. Optics, field guides, and birding apps will be discussed, and there will be some “homework” involved as well.

WOO HOOT!

BIRDY NEWS BITES WORTH CELEBRATING

CELEBRATING 500 NESTBOXES!

Tim Morey and Don Larson are longtime volunteers, donors, and Tucson Audubon supporters. Over the years they've donated their time and skill to build numerous Lucy's Warbler, owl, kestrel, and even bat boxes for us. This month they've hit a big milestone by building their 500th nestbox for us! We are so grateful for their hard work, and on behalf of all animals who have gained a safe place to roost and nest, THANK YOU!



Tim Morey and Don Larson with Olya Phillips, Jonathan Horst

PASSING WITH FLYING COLORS!

Tucson Audubon's In-house Strike Team successfully completed an invasive plant treatment project in Mansfield Canyon of the Santa Rita Mountains in collaboration with Borderlands Restoration and the Coronado National Forest. Despite the amazing amount of rain this summer, the crew was able to treat invasives on about 30 acres at four disturbed hard rock mining sites and 8 miles of roadside with minimal damage to non-target plants. The list of invasives includes Bermuda grass, Lehmann's, weeping, and African lovegrass, stink grass, crab grass, yellow bluestem, natal grass, barnyard grass, Johnson grass and Russian thistle (tumbleweed). Coronado National Forest staff was very impressed—Congratulations!



Mansfield Canyon, Tony Figueroa

GIFTS IN HONOR OR MEMORY OF

In memory of Barbara Swain from Molly Kimball

In honor of Bill Lisowsky from Sarah Metz

In memory of Bob Helming from Antoinette LaBarre, Carol Helming, Karen Holloway, Linda Lundergan Morenz & Barry Morenz, Margery Osborn Pease & Roger Pease, and Sharon & Marshall Johnson

In honor of Canny Clark from Susan Clark

In memory of Eva Webster from Nedra Katz

In honor of Gabriel Nunez from Carolyn Donohue

In memory of Grace & Dick van Duivenbode from Maureen Gillardi & Roy VanDuivenbode

In memory of Joan Goldberg from Joanne & Michael Goldberg

In memory of John Edward Knapp from Cathy Aspinwall & Catherine Gioannetti

In honor of Julia Gordon from Windibrow Foundation

In memory of Lois Cadwalader from Sally Hiar

In honor of Mary Walker from Patti Caldwell & Bob Gary

In honor of Michelle Ort from Kim Ort

In memory of Peter Salomon from Barbara Bickel

In memory of Ralph Van Dusseldorp from Marilyn Van Dusseldorp

In memory of Richard Flower from Bill Flower

In honor of Sara DeRouen Pike from Amy DeRouen & Corey Perez, and Christi Valley

In honor of Tim Helentjaris from Norma Helentjaris

In honor of Tricia Gerrodette from Margaret & Bill Case

In memory of Virginia McCalla Peterson from Marcelyn McCalla

In memory of Zeppelin Kellam Neal from Sylvia Verlander



Red-tailed Hawk, Francis Morgan

YOU ARE TUCSON AUDUBON'S SAGUARO AND CHOLLA

When you saw “Birds & Plants” on the cover of this issue, what birds did you think of first? For me, one of the first birds that came to mind was the Cactus Wren. They’re the state bird of Arizona for good reason: they’re ubiquitous in our region, easily recognizable, and their lives are very much entwined with the plants of the Sonoran Desert, finding safety in the thorns and spines that fend off would-be predators.

That’s what I love so much about the intersection of birds and plants. Whether it’s for safety, sustenance, or shelter, birds need their plants, and plants need their birds. Each depends on the other to help them survive and thrive.

It’s the same with Tucson Audubon. We don’t exist, we don’t thrive, without you. Your support nurtures the work that we do. In return, we hope, we provide you with what you love: gorgeous bird photos and compelling

information; field trips and workshops to allow you to engage with other bird enthusiasts; the Southeast Arizona Birding Festival to bring you close to birds and their habitats; and conservation and restoration work to ensure that this is all possible far into the future.

Last month, I sent you a letter about our work involving the most iconic Sonoran plant: the saguaro cactus. In that letter, we asked for your support not just for our saguaro work, but for all of the things we do to promote birding and a healthy, thriving habitat for birds. With your gift in response to that letter, or with the envelope included in this issue, you have helped us ensure that healthy future for Southeast Arizona. *Thank you.*

Just as the Cactus Wren finds safety in its cholla, and the Purple Martin takes comfort in its saguaro, we feel supported, loved, appreciated, and nurtured by you, the members of our wonderful community.

Ethan Myerson
Director of Development and Communications
emyerson@tucsonaudubon.org



Cactus Wrens, Mick Thompson

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SOCIETY

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CULTIVATE YOUR LOVE OF THE BIRDS AND PLANTS OF THE SONORAN DESERT!



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