RESTORE
BUILDING A BETTER WORLD FOR BIRDS
REMEMBER 2019?

Two scientific studies of colossal scale announced disturbing findings that shook the world of those who care about wild birds.

We learned that:

**BIRD POPULATIONS HAVE DECLINED BY 29% SINCE 1970 AND WE HAVE LOST ALMOST 3 BILLION BIRDS IN JUST HALF A HUMAN LIFETIME.**

—Findings of the American Bird Conservancy and the Cornell Lab of Ornithology

**TWO-THIRDS OF NORTH AMERICA'S BIRDS ARE THREATENED WITH EXTINCTION FROM THE EFFECTS OF CLIMATE CHANGE WITHIN THE NEXT 80 YEARS. THAT'S 389 DISTINCT BIRD SPECIES WE COULD LOSE IF WE DON'T ACT NOW.**

—Findings of the National Audubon Society

WELCOME TO 2020!

As discouraging as the findings may be, these publications have increased our understanding, and we now know specific actions we can take this year, today, right now to rebuild a better world for birds.

We want you to know that Tucson Audubon is more committed than ever to our conservation, advocacy, habitat restoration, bird sanctuaries, education, field trips, data collection, and scientific enquiry—all working in concert to protect birds and their habitats in a rapidly changing environment.

In fact, this is the work that Tucson Audubon has been engaged with from the beginning. Read on to learn more about the change you effect when you support Tucson Audubon through membership, volunteering, participating in field trips and classes, and by donating to ensure the continuation of our programs.

All together, we can build a better world for birds. On behalf of the Tucson Audubon staff, Happy New Year!
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ON THE COVER
Acorn Woodpecker by B.N.Singh, flickr.com/photos/bnsingh. National Audubon’s Survival By Degrees reveals Acorn Woodpeckers to be highly vulnerable to warmer temperatures as oak/pine habitat is diminished.

RIGHT: Vermilion Flycatcher, David Quanrud

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Clearly, our birds face a crisis today. Nearly 400 North American species are on the brink of extinction. We’ve lost a quarter of the population since 1970, a full 3 billion birds.

The situation reminds me of the 1960s when rain was toxic, rivers were polluted enough to catch on fire, and poor air quality fueled skyrocketing rates of lung disease. The times—then and now—demand action.

Activism in the 1960s led to strong federal pollution controls for air and water. A cleaner, healthier planet for birds, fish, animals, and people seemed certain. But now, we are dismayed to witness the rollback of critical protections, including the Migratory Bird Treaty Act. And we face the horrific effects of climate change that are only slowly being addressed locally and globally.

As a young environmental chemist at the Environmental Protection Agency (EPA) in 1970, I learned that it’s far more useful to become engaged with a problem than depressed about it. Now, as a mature volunteer conservationist, again I choose to hope—and to take action.

The current alarms can again bring out the best in us. Taking aggressive action now gives 76% of vulnerable bird species a far better chance to survive.

What exactly can we do? We can work with Tucson to:

LEARN AS MUCH AS YOU CAN… study birds, the environment, and advocacy, so that you are better equipped to help solve the problems.

TAKE A STAND… talk to your family, friends, and neighbors; call your legislators; write to decision makers; get involved to make change at a higher level.

HELP US RESTORE HABITAT… join our Habitat at Home program, volunteer with our restoration team, donate to support our efforts across Southeast Arizona.

BUILD A BIRD SAFE WORLD, NOW… bird proof your windows, keep cats indoors (or build a catio!), drink only shade-grown coffee, reduce your consumption of single-use plastics, and reduce your carbon output.

Tucson Audubon is committed to a vision of birds and people thriving together. We leverage our resources with sound science. We have a proven method for engaging people of all ages in the stewardship of bird life and habitats so we can foster unforgettable experiences in the beautiful and incomparably diverse regions of Southeast Arizona.

We invite you to walk, talk, and bird with us throughout 2020.

Sincerely,
Mary Walker
President, Board of Directors
JANUARY IN THE GRASSLANDS | CHESTNUT-COLLARED LONGSPUR
During the first and typically coldest month of our year, the grasslands of San Rafael Valley and Sonoita teem with sparrows taking advantage of the bounty of seed produced in the rainy summer. Vesper, Baird’s, and Savannah Sparrows, along with Chestnut-collared and McCown’s Longspurs ply large areas in search of the seeds of native gramma grasses, sacaton, and others they prefer. The introduction and spread of Lehman’s lovegrass across Southeast Arizona has severely impacted these birds’ suitable habitat. Tucson Audubon’s recent surveys for Chestnut-collared Longspurs have shown that they favor areas where mostly native grasses are found. For this climate-threatened species to survive in its winter habitat, Tucson Audubon restoration programs replacing Lehman’s lovegrass with native species could be very beneficial.

FEBRUARY IN THE MOUNTAINS | ACORN WOODPECKER
Up in the oak and pine habitat of our local Sky Islands, cooperatively breeding families of the gregarious Acorn Woodpecker are easy to find. Family groups of up to a dozen or more individuals share granaries of stored acorns which allow them to survive the winter without migrating. Curiously, one local population in the Huachuca Mountains may be an indicator of the future for this clown-faced woodpecker. This small group presumably heads to the oak-rich mountains in Mexico when their stores are exhausted here, returning to Arizona in the spring to take advantage of fresh acorns and eventually breed during the summer rains. National Audubon’s Survival By Degrees reveals Acorn Woodpeckers to be highly vulnerable to warmer temperatures as oak/pine habitat is diminished. Could the birds living in other Sky Islands soon be employing the same strategy to survive the winter? The mountains sure would be quiet and a lot less lively.

MARCH IN THE DESERT | GILDED FLICKER
March, nesting has already begun for lowland desert species such as Curve-billed Thrasher, Cactus Wren, Anna’s and Costa’s Hummingbirds, and a regional specialty, the Gilded Flicker. This large woodpecker is highly dependent on dense stands of saguaro cactus and can be easier to find in March when they call and drum to establish breeding territories. Scan the tops of saguaros and keep an eye out for bright yellow feathers when they fly. If you see orange feathers, you have a Northern Flicker—they are present in the lowlands during winter! Gilded Flicker climate vulnerability is listed as high on Audubon’s Survival By Degrees report (27–67% habitat loss), and the total population has declined by an estimated 54% between 1970 and 2014. Because Flickers excavate many of the cavities in saguaros, creating homes for other species such as Western Screech and Elf Owls, Purple Martin, and Ash-throated and Brown-crested Flycatchers, the health of the Sonoran Desert is greatly enhanced by Gilded Flicker conservation.
Last fall, the publication of two major avian research studies revealed, for the first time, the extent to which climate change has affected, and will continue to affect, North American bird populations. Extensive research conducted by the American Bird Conservancy and the Cornell Lab of Ornithology confirmed the drastic decline of North American bird populations in recent history. Meanwhile, a comprehensive study undertaken by the National Audubon Society looked forward to project how birds may respond to predicted climate conditions of the near future.

Together, this body of research paints a grim picture of how birds are surviving in the Anthropocene and their chances of survival into the future. The Anthropocene is a term sometimes used to refer to the current geological age, viewed as the period during which human activity has been the dominant influence on climate and the environment. While our human activity is fueling the problem, it also holds the key to many solutions.

Despite the disturbing news these studies share, they can also serve as pragmatic catalysts for change—offering opportunity for those who care about birds and their habitats to join a national, and even global, community in taking action to build a better future for birds, and for ourselves.

Both of 2019’s major bird studies focus on the opportunity for positive change this information provides us. We know what the biggest threats to birds and habitat are—they also happen to be threats to human health and safety. Taking action on climate change now will mean building a safer, healthier, and more sustainable future for all of us.

Your contributions to Tucson Audubon Society help us inspire people to enjoy and protect birds. Please give today at tucsonaudubon.org/donate. Thank you!

Learn more and read the full studies at climate.audubon.org and 3billionbirds.org.
**LEARN AS MUCH AS YOU CAN**
The more you know about birds, the environment, and advocacy, the more you can do to help solve the problems.
- Join Tucson Audubon and participate in our classes, field trips, lecture series, and more.
- Read the National Audubon study: [climate.audubon.org](http://climate.audubon.org)
- Read the Cornell Lab and American Bird Conservancy study: [3billionbirds.org](http://3billionbirds.org)
- Visit our Nature Shop and Library at 300 E. University Blvd.

**TAKE A STAND**
Be a voice for birds and take action to build a more sustainable future; each small step toward larger action helps, and you don’t need advocacy experience to get started.
- Start the conversation with friends, family, and neighbors. Help spread important information.
- Get to know your decision makers, from local HOA members to our federal delegation.
- Put pen to paper. Regional newspapers are always seeking Letters to the Editor.
- Sign up for Tucson Audubon Action Alerts to engage with our advocacy program: [tucsonaudubon.org/advocacy](http://tucsonaudubon.org/advocacy).

**HELP US RESTORE HABITAT**
Tucson Audubon restores habitat across Southeast Arizona and can help you do the same at your own home. Become an active agent in the many solutions at our fingertips.
- Join our Habitat at Home program and learn to support wildlife locally.
- Visit Tucson Audubon’s native plant gardens for inspiration at our Nature Shop, Mason Center, and Paton Center for Hummingbirds.
- Volunteer with our Habitat and Ecological Restoration Crew when opportunities arise.

**BUILD A BIRD SAFE WORLD, NOW**
You can help birds right now in your own backyard, and front yard, and all around your house.
- Birdproof your windows. Look for solutions to stop bird strikes.
- Keep pets and birds apart. Build a catio for your kitty?
- Drink shade-grown coffee. From our Nature Shop.
- Ditch the single-use plastic. Help reduce pollution.
- Research and reduce your carbon footprint.
BUILDING A BETTER WORLD FOR BIRDS

Restoration is action, doing, directly affecting positive change for birds and people.

Jonathan Horst
Director of Conservation & Research
jhorst@tucsonaudubon.org
Habitat destruction and ecosystem disruption are the greatest threats to the survival of North America’s birds. We often hear staggering statistics: 95% of Arizona’s riparian areas are now lost and the Fremont cottonwood-willow gallery forest is the most threatened community in the US. Riparian areas, the teeming life zones along waterways, are both the breeding and feeding grounds for many bird species. Once “lost,” are they gone forever?

Restoration is the line of work that strives to breathe new life into damaged or destroyed landscapes—it’s a science, an art, and back-breaking labor. It’s also one of Tucson Audubon’s most important investments in building a better world for birds.

Restoration is about helping the landscape function better. Whether that’s from the perspective of a single species, or a broad suite of geomorphic and hydrologic functions.

Restoration is action, doing, directly affecting positive change for birds and people.

How does one know what to do in any particular setting to achieve the desired ends? And which ends are desired in the first place? These foundational questions guide the work implemented by our Restoration Field Crew. In 2017 Tucson Audubon integrated our Restoration and Conservation departments, and then greatly increased our applied research. When tackling a new restoration project, we now, in very intentional fashion and with a wide range of expert partners, integrate the whole process from research to restoration in the following way. We:

1. identify and prioritize specific threats and issues,
2. research how to address those threats,
3. experimentally determine the most effective means of improving the situation,
4. implement identified solutions, and
5. follow-up with monitoring to quantify the impacts of our actions.

Of course, when someone else has already identified the best solution, we implement their recommendations, and we’re always networking with other folks in arid areas to make sure we’re up-to-date on best techniques. But, as it turns out, we frequently have the privilege and pleasure of creating novel solutions to existing problems and explore both ancient and cutting-edge techniques to achieve desired ends here in Southeast Arizona. That’s what keeps me going.

Words mean different things at different times to different people. Even among those actively engaged in Restoration, there are varied understandings. A couple of definitions will help you best understand the work we do. Our Restoration department conducts two primary types of restoration: ecosystem and habitat.
Ecosystem Restoration is the restoration of functions. Functions are processes that allow the land to work more productively without ongoing human input. Examples are reconnecting floodplains to rivers, reestablishing soil microbial activity, and rockwork to help slow erosion and rebuild topsoil.

Habitat Restoration is specifically focused on making an area suitable habitat for a single primary species, or sometimes a group of species that use a similar habitat. A classic example is installing nestboxes for bluebirds (or now Lucy’s Warblers!) to provide nesting cavities where there were none but all other habitat requirements already existed. Creating a wetland that must be maintained with ongoing addition of water is another exceptionally important regional example.

Almost all restoration falls into one of these two broad categories. Restoration is explicitly NOT returning to the physical conditions that existed at some “natural” or arbitrary point in time in history. Humans and other species have been altering the landscape for millenia, and climate conditions are dynamic... and now with a climate that’s changing exceptionally rapidly such an endeavor is failed from the outset.

Wherever possible Tucson Audubon operates within a framework of Reconciliation Ecology. It’s a rare event where humans operate for the good of species or landscapes when it is contrary to their perceived self-interest. Reconciliation Ecology recognizes this and seeks to find ways and places where human interest and natural interest intersect. This increases stakeholder investment in the work, unlocks additional funding, and builds public good will towards projects, reducing the risk of future destruction. It also allows the opportunity for localized pockets of novel and extremely high-value habitat to be created.

Wetlands, that are created for bioremediation of municipal wastewater, like our own Sweetwater Wetlands Park in Tucson, are a classic example; not only do wetlands purify water efficiently, they are also exceptionally important habitat for a wide range of species in arid environments.
WEEDS, SEEDS, AND BIRD NEEDS: 5 RESTORATION SKETCHES

Habitat and Ecosystem Restoration are important components of Tucson Audubon’s work. Our restoration projects benefit the local ecosystems, enhance the natural beauty in our own backyards, and increase the likelihood that future generations will be able to enjoy our unique Southeast Arizona home. Below are profiles of a few of the native species and places our restoration programs support.

WESTERN YELLOW-BILLED CUCKOO
Tucson Audubon’s Paton Center for Hummingbirds

In October, 2014, after 30 years of petitioning by conservationists, the Western Yellow-billed Cuckoo (Coccyzus americanus occidentalis) was granted protection as threatened under the Endangered Species Act as a distinct population segment of the species. Over the last 100 years, breeding pairs in California have declined from more than 15,000 to just 50. Arizona now has the highest number of breeding pairs, between 170 and 250.

Cuckoos are one target species of habitat restoration work on the Cuckoo Corridor, five acres of land straddling Sonoita Creek and recently added to the Paton Center. Non-native and invasive Johnson grass, providing birds very limited habitat value, had taken over the floodplain excluding most native species. With the goal of extending breeding habitat for cuckoos, we have worked continuously to remove the Johnson grass and establish key native species. Fifty Arizona walnuts, primary host plants for large soft-body insects such as tent caterpillars that cuckoos feed their young, have now established along with a wide range of native understory plants that support pollinators and a variety of bird species.

As part of this project, the Restoration Crew pioneered a successful new technique for transplanting sacaton, an important floodplain grass, while dormant. The Cuckoo Corridor efforts are spearheading a broader, regional process for invasive control and habitat improvements throughout the Sonoita Creek Watershed.

ELF OWL AND BUFFELGRASS | Tucson Mountain Park and the Sonoran Desert

The Elf Owl (Micrathene whitneyi) is the smallest owl in the world. A secondary cavity-nesting bird, they cannot create or excavate their own nest hole and rely on woodpecker holes in mature saguaros and hardwood trees. Already listed as a species of conservation concern by the Arizona Game and Fish Department due to loss of nesting habitat from development, fires driven by buffelgrass and other invasive species now prove to be an increasingly severe threat.

For most secondary cavity nesters, adequate nest sites is the population-limiting factor. At higher elevations, Elf Owls sometimes use free-standing nestboxes. In Tucson Mountain Park, we are currently testing whether nestboxes can be used as a conservation tool for them at lower elevations, as well as for resilience against ongoing loss of large saguaros.

Sometimes threats directly impact one species and have consequences for many more, and must be addressed from multiple angles. Numerous cavity-nesting birds, including Purple Martins and Cactus Ferruginous Pygmy-owls, rely on saguaros. Buffelgrass-fueled fires readily kill mature saguaros—plants that take 100+ years to once again be suitable for nesting. Starting in 2020, Tucson Audubon’s new collaborative Invasive Species Strike Team, a partnership with the National Park Service and Fish and Wildlife Service, is joining the fight to save key habitat and sensitive areas within the Sonoran Desert and Desert Southwest.
Chestnut-collared Longspur (*Calcarius ornatus*) has declined by more than 87% since 1966, with an estimated 33% decline within 2003–2015. In 2004, it was listed as near threatened on the International Union for Conservation of Nature (IUCN) Red List, and in 2018 was elevated to vulnerable status, one step below endangered. A major cause of population decline in grassland bird species, like the Chestnut-collared Longspur, is habitat destruction or alteration. Invasive plants like Lehmann’s lovegrass spread through these habitats harming both breeding and wintering habitat. A study of Chestnut-collared Longspur nests showed the odds of a nest surviving any given day were 17% lower in exotic grasses than in patches of native grass.

Ninety percent of grassland bird species that nest in the northern Great Plains in the US, winter in Chihuahuan Desert Grassland. Many factors can degrade the quality of this habitat, including conversion to agriculture, resource extraction, and fragmentation. Southeast Arizona still has high quality grassland habitat at Las Cienegas National Conservation Area and San Rafael Grasslands, both of which are Global Important Bird Areas. Tucson Audubon is in the initial stages of expanding our restoration efforts into grassland habitat. Our first goal will be to identify what makes prime habitat and what constitutes potential habitat in order to prioritize targeted areas for intensive longspur-oriented habitat restoration.
Southeast Arizona is home to a vast array of pollinators including many bird species (especially hummingbirds), approximately 3,000 butterfly and moth species, 1,300 species of native bee, and 28 bat species. Giant and Pipevine Swallowtails, Queens, and Checkerspots are among the most recognized butterflies in our region, while the Monarch, a candidate for listing under the Endangered Species Act, can also be spotted. Our bats include the Lesser Long-nosed Bat, Mexican Long-tongued Bat, and Mexican Long-nosed Bat. The Mason Bee is an extremely valuable pollinator as well.

Less than 10% of land in the US remains undisturbed, which means less natural habitat is available for pollinators to find food, water, shelter, and a place to raise their young. As our climate changes at an increasingly rapid rate, habitat and ecological restoration is proving to be an effective solution for supporting many forms of wildlife. Although some human activities such as agricultural conversion of land, urbanization, and the introduction of non-native species negatively impact the environment, a great example of a positive, regenerative human activity is planting pollinator gardens.

Pollinators have seen drastic declines in recent years, in large part due to the decrease in availability of the specific native plants their larvae require for food. Popular landscaping encourages the use of pest-resistant species—species with zero food value for insects, or treats nursery plants with systemic pesticides making them deadly for pollinators. Giant parking lots, cement sidewalks, and multi-lane freeways replace native landscapes with hot barren surfaces. Fortunately, we have plenty of space in the urban world to creatively share with our birds, pollinators, and other wildlife when we choose to fill our yards and outdoor spaces with native plants and pollinator gardens.

The Richard Grand Memorial Meadow at the Paton Center is Tucson Audubon’s flagship pollinator garden. Penstemon, blanketflower, Mexican hat, and 30 other species replace the tangle of bermudagrass and sticky grass of the former paddock. The pond in the meadow was crafted explicitly for easy access by birds, and the sandbars along the banks have been constructed so that butterflies can extract the minerals they need from the exposed wet sand.

Partners for Fish and Wildlife provided a grant that funded six pollinator gardens, including a large one at El Rio Preserve. Tucson Audubon has installed numerous additional gardens. We’ve recently installed or contributed to gardens at: Tumamoc Hill, the Literacy Connects headquarters and adjacent International Rescue Committee community garden, Sweetwater Wetlands, Ochoa Elementary, our Historic Y offices, and our Mason Center. Look for upcoming gardens at: Marshall Elementary School, New Spirit Church, Congregation Chaverim, Canoa Hills Trails, Desert Meadows Gardens, and many more.

In concert with Bat Conservation International’s campaign to plant one million agaves, Tucson Audubon planted 20 at the Mason Center, more than 40 at El Rio Preserve, 60 at Sweetwater Wetlands Park, 10 at Ochoa Community School, and 20 at the Paton Center. Agave parryii and palmeri are native species important to the threatened Lesser Long-nosed Bats.
Jonathan Horst  
*Director of Conservation & Research*

**What brought you to this work?**
My original Restoration Biologist position here was a very natural combination of many pieces of my history. A restoration biologist is basically a “Nature Farmer.” I come from a long line of farmers on both sides of the family, and grew up with summer jobs on farms even though we didn’t live on one ourselves. I’ve been a gardener since I was a little kid, and since middle school I’ve had a table full of cactus in my room or house. After studying biology in college, I moved to Arizona and had multiple field research positions studying local birds. Grad school was back to plants—community ecology and studying coexistence mechanisms in our incredibly diverse region. So, it’s all been birds and plants, research and growing things, and now it’s specifically researching and creating projects based on plants for birds...and trying to answer a million questions while making the region better for as many species as possible.

**Favorite restoration plant?**
Beebush, even though mesquite is most useful.

**Favorite aspect of the work?**
Determining ways to address questions with conservation implications, implementing, and then understanding the answers.

Tony Figueroa  
*Invasive Plant Strike Team Crew Lead*

**What brought you to this work?**
After getting married, my wife and I started going on month-long summer road trips. Our travels always ended up taking us to National Parks, Monuments, and forests throughout the country, and after a few years I asked myself: “Self, how can I work in places like these?” I went back to school and earned a degree in Wildlife Conservation and Management from the School of Natural Resources at the U of A.

**Favorite restoration plant?**
I was able to help with restoration projects for the Grand Canyon’s only endangered plant, the Sentry Milk Vetch. It lives on the edge of the rim, so every time we visited the restoration sites we were treated to magnificent views.

**What plant or creature do you often run into on the job and identify with?**
Canyon wrens. They have such a joyful song, and are generally living in the places that I like to hike. And the creosote bush, because it just reminds me of home. It can bloom any month of the year and nothing beats the smell of creosote after a rainstorm.

Kari Hackney  
*Restoration Project Coordinator*

**What brought you to this work?**
I grew up on a farm and always enjoyed physical work and being outside. I went to college knowing that I wanted to spend my career protecting our planet, but I wasn’t sure exactly how that would look. Three degrees later, I was convinced that I wanted to get involved in federal land management. After moving to Tucson and becoming familiar with the work of all the local agencies and organizations, I found myself drawn to Tucson Audubon and the results the restoration crew was producing. They were fixing our planet a few small parcels at a time, and I wanted to be a part of that.

**Favorite restoration plant?**
Butterfly mist, *Conoclinium greggii*, is my go-to. If you want to attract butterflies, this is your plant.

**Best wildlife interaction?**
While hanging up nestboxes in Harshaw, I spooked a bear, and naturally, it spooked me. I could feel the power of it as it ran away and the ground shook.
Dan Lehman
Field Crew

What brought you to this work?
The thing that brought me to Tucson Audubon was when I was asked to fabricate steel security cages for booster pumps located at two well sites at a habitat restoration site in Marana Arizona. I was then asked to help install the irrigation system and one thing led to another. I was hired on with the field crew in 2002.

Favorite restoration plant?
One of my favorite restoration plants is creosote bush, the classic desert plant. Although this plant can be touchy if it’s roots are disturbed when moved from a pot, once established, they are tough, and you can’t beat the aroma after a rain.

Interesting or funny thing about yourself?
One interesting note about myself is that I’m a sculptor/blacksmith. I studied both art and biology in college, receiving a BFA from the University of Texas El Paso.

Rodd Lancaster
Field Crew Supervisor

What brought you to this work?
I grew up on the north side of Tucson surrounded by the lush and diverse Sonoran Desert. This is when parents would send their annoying kids outside to play without the fears of today. So, I got to know grand stretches of the desert with the help of my bicycle. However, as I got older, I watched as my favorite desert playgrounds got bladed down one at a time. I was devastated. Later, I was taking a Permaculture design course when I met Ann Audrey. She was one of the instructors and she became the first Restoration Manager for Tucson Audubon Society. She needed help and I was thrilled to jump on board with restoration.

Best wildlife interaction?
It was another hot day at the old Simpson Farm site. Dan Lehman and I were watering plants that we had put in the ground and surrounded with chicken wire cages to protect them from predation. We came across a big Mojave rattlesnake stuck within the chicken wire. It was too big to go forward any further, and its scales were caught on the fencing so it couldn’t go backwards either. We had to cut the cage to get it unstuck. As I’m sure you all know, most rattlesnakes have venom composed primarily of hemotoxic properties. However, the Mojave rattlesnakes are the exception. They have venom that contains more neurotoxic properties than hemotoxic, which makes them very dangerous. So, I thought I would be the brave one, and I told Dan I would cut the cage it was stuck between, if he could pin it down. Then I looked around for a stick he could use. But before I could find a stick, I saw that Dan was holding the snake just below its head. I was stunned. Well, we got the snake loose and it seemed okay. Dan saved two lives that day, the snake’s and mine.

Favorite restoration plant?
The cottonwood tree. I love taking a branch from a living tree and planting it to become another tree.
Tucson Audubon’s Habitat at Home program is a self-guided, step-by-step process that encourages, celebrates, and assists homeowners in creating beneficial habitats in their outdoor spaces. Each step has a specific goal and when combined, create beautiful places for birds and pollinators to thrive. Any space can provide critical habitat for birds and pollinators, no matter the size or location. And remember, habitat that is beneficial to birds is beneficial for people, too!

Registration is easy and may be done at any time along your habitat building journey.

Not sure where to start? Register online at tucsonaudubon.org/habitat and receive the resources you’ll need to begin. Upon registration you will receive locally appropriate plant lists, planting strategies for creating shelter with shrubs and trees, ways to provide food and water, nest box information, and “Recipe Cards” on how to attract specific birds to your landscape.

PHASE 1. FOOD: Plant native plants. They are adapted to our local climate, and native birds and insects are attracted to them. Planting for blooms throughout the year will keep the birds and pollinators coming. Climate change is causing phenological mismatches, especially here in Southeast Arizona. These occur when periodic plant and animal life cycle events fall out of sync with one another. Seasons are coming earlier or later and not all bird and pollinator species are able to adapt to these changes. Flowers blooming too early or too late negatively affects both parties. Plants may not be getting pollinated due to a scarcity of insects. Migrating species that plan their moves to coincide with the blooming times of plants may lack the food to sustain them during their journeys, and breeding birds may not have enough insects to feed their insect-reliant chicks. By providing birds and pollinators with an ample supply of nectar, pollen, fruits, and seeds throughout the year, backyard habitats can relieve some of this stress.

PHASE 2. WATER: Add a water feature. Water is a necessity, especially in our hot, dry climate. Providing water is a great way to attract birds and pollinators to your yard with little effort. A simple, shallow water dish is all it takes.

PHASE 3. SHELTER AND PROTECTION: Add a nest box. With the arrival of new residents, urbanization has dramatically increased, resulting in the destruction of natural nesting sites. Rising temperatures are also causing some migrant species to move farther north. Installing nest boxes in backyards is more important than ever. Plus, who wouldn’t love watching a pair of Western Screech-owl’s raising chicks in their backyard?

PHASE 4. WATER HARVESTING: Water is imperative to all life. Conserve water and use it wisely. From berms and basins to cisterns, catching and retaining water will save money on your water bill and help conserve this precious resource.
SCIENTIFIC NAME: *Lycium fremontii*

FAMILY: Solanaceae (Nightshade)

NATIVE RANGE: Western and southern Arizona and southeast California to Baja California and Sonora, Mexico; sea level to about 2500’ elevation

WILDLIFE VALUE: Dense habit ideal for cover/shelter/nesting; flowers invite a variety of pollinators; berries devoured by birds and other animals.

There are over a dozen species of wolfberry in the Sonoran Desert and all look more or less alike, though sizes vary. Fremont wolfberry is one of the larger ones (to 9’ tall) so give it a wide berth. These dense thorny shrubs are effective as screens or barriers and are ideal hiding places, providing cover, shelter, and nesting sites. Like many other desert shrubs, wolfberries sprout and drop leaves in response to rain and drought. When leafless, they are not particularly attractive so best to plant in outlying, low traffic areas. Plant in full sun and water to get them established, but then they need little care. Prune if you want to control size or shape, but birds prefer the wild, natural look.

Fremont wolfberry blooms on and off through the year, but primarily January–March. The flowers are purple lavender, short (1/2”), and tubular in shape. Pollinators include bees, butterflies, and hummingbirds. I’ve seen swarms of Queen butterflies at profusely blooming plants. Blossoms are followed by juicy orangish red fruits, eaten by thrashers, mockingbirds, cardinals, Pyrrhuloxias, Phainopeplas, and more.

Although not suitable for small home gardens, wolfberry remains on my top 10 list for its wildlife attracting value.

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Are you already on your way to a beneficial habitat? Or have one you’d like to show off? Join the Habitat at Home program and support the cause! Everyone who joins is provided with an attractive aluminum sign to display. There’s power in numbers, and the more visibility the program gains, the more change we can effect. Do it for the birds!

Find more information at tucsonaudubon.org/habitat or email habitat@tucsonaudubon.org.

Registration fees:
Tucson Audubon Members = $35.00
Non-members = $45.00

*Registration fees help pay for the cost of signs and funding the program.

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Kim Matsushino
Habitat at Home Coordinator
kmatsushino@tucsonaudubon.org

A home landscape ready for pollinators; Broad-billed hummingbird, Mick Thompson; Lesser long-nosed bat, James Capo. The lesser long-nosed bat was listed as Endangered in 1988 and was removed from the list in 2018. This is the first bat species delisted due to successful population recovery methods.

Lynn Hassler, Nature Shop Garden Volunteer Captain
Paton Center Update

Tucson Audubon celebrated the completion of the Paton Center for Hummingbirds Capital Campaign over the course of a long weekend in April 2019. The campaign wrapped up a year earlier than originally planned, thanks to the generous contributions of Paton supporters from across the nation and around the world. Since that time, a project team has formed and is determining the path forward for Tucson Audubon’s most ambitious project yet.

The Paton Project Team, comprised of board and staff, are now in the final stages of retaining the professional services of a project manager. Of 19 prospects that were targeted with a Request for Qualifications (among them, architects, construction firms, and LEED AP professionals), three teams were invited to a pre-proposal site visit in December 2019. Final proposals for project management are due this month (January) and project team members will be busy conducting careful evaluations of all three candidates.

Once a project manager is hired, we’ll begin the process of setting a timeline and a budget, and connecting with professionals who will help us fulfill two important mandates:

1. Preserving the legacy experience of birding in an intimate setting.
2. Constructing a building and configuring surrounding details—parking areas, paths, signage, etc.—in the most environmentally-conscious and sustainable ways possible.

The Paton Project Team, in collaboration with the project manager, will endeavor to minimize construction-related disturbance at the property. However, it’s likely that periods of partial or full closure of the Paton Center will be necessary to facilitate construction activities and maintain visitor safety. We don’t anticipate demolition of the main house or construction of a new building to take place before May 1, 2020. We recommend staying tuned to Tucson Audubon emails and social media posts for updates about current conditions and access.

Paton Center Project Team
In summer, Green-tailed Towhees are denizens of brush-covered mountain slopes, chaparral, and sage expanses. These large sparrows breed in a variety of semi-open habitats that have dense cover near the ground, typically composed of sagebrush, manzanita, other low bushes and scattered pine trees. Breeding exclusively in the western U.S., lining their nests with all manner of material, including porcupine hair, the southern edge of its breeding range is in Northeast Arizona. This species migrates as far south as central Mexico, with the northern wintering range including California (where some are permanent residents), Arizona, New Mexico, and Texas. Green-tailed Towhees have a penchant to wander outside of their normal range, well to the east, to the delight of fortunate birders.

My first sighting of this species was well out-of-range—in Michigan—visiting the feeder of homeowners who opened their doors (literally!) to birders. Ever since I first visited the Paton’s back in the 90’s, I’ve been impressed by the generosity of kind souls who allow others to enjoy the birds and nature of their yards. Against white, fresh-fallen snow, the impossibly rich olive, giving way to yellowish-green of the wings and tail, the dark, gray chest, snow-matching white throat, and explosion of rufous on the crown is etched forever in my mind.

Living under dense, brushy cover, Green-tailed Towhees can be difficult to see, especially in winter when males aren’t defending territories. They sometimes join mixed species flocks in desert washes with dense mesquite, scratching in the leaf litter like other towhees. Their presence most often given away by their querulous, mewing call. Watch closely the edges of the Paton property, including leaf litter and brush piles, especially near the wash that parallels the property, and by the main pond in the meadow. With a little persistence, and luck, you will be able to view this stunner. It’s well worth the effort. I’ve seen no field guide that fully does justice to this beauty.

Green-tailed Towhees are listed in National Audubon’s Survival By Degrees report as an Arizona species that is most threatened by a combination of climate change and additional climate-related threats. It is predicted to lose 44–75% of its summer range, most of which is in the White Mountains and Mogollon Rim.
In my mind, one of the more remarkable birding events of 2019 was the plethora of Rufous-capped Warbler sightings from varied localities through much of Southeast Arizona. First detected in Arizona in 1977 when a family group bred in Cave Creek Canyon of the Chiricahuas, this species has been reported most years since the mid-1990s, with the majority of observations being from a few specific localities that likely represent continuing individuals or family units. The true status is obscured by sedentary birds holding territories for multiple years in heavily birded areas like Florida, Hunter, Miller, and French Joe Canyons. Breeding attempts (successful and otherwise) have been documented on numerous occasions and this has no doubt increased the overall Arizona population through dispersal and establishment of new territories. The number of reports from 2019, many from new localities, suggest that the species, like Black-capped Gnatcatcher in the last decade, has been successful in establishing an enduring population.

Turning our eye to the species as a whole, Rufous-capped Warbler as it is currently comprised is likely made up of two distinct species: one that occurs from the borderlands of Arizona and Texas south to Guatemala, and a second that occurs from central Panama northward to Guatemala. These two forms are rather distinct from one another. The northern birds have yellow restricted to the throat, a more distinct white malar area, a gray back, and a longer tail. The southern birds are shorter tailed, and entirely yellow below, with greenish upperparts, and more extensive chestnut colored cheeks. Importantly, the two forms differ vocally without overlap. The northern clade is referred to as rufifrons, while the southern one is delattrii. There is an outlier in the complex of populations, an isolated one in southern Belize (salvini). It is considered part of the rufifrons group, but has yellow coloration throughout the underparts. But in voice and structure it resembles the northern birds. The southern birds were once considered a separate species, Chestnut-capped Warbler, but were lumped based on the assumption of hybridization where the populations meet in Guatemala. Anecdotal observations in recent years suggest that hybridization is not occurring there and that the two are “good” species.

Chris Benesh is a tour leader for Field Guides Incorporated (fieldguides.com) and a long-time Tucson resident. An avid birder with a keen interest in bird taxonomy, identification, and education, Chris has served several terms on the Arizona Bird Committee and has taught numerous workshops focused on improving identification skills.
STRENGTHEN THE FLOCK!

You can impact the Tucson Audubon mission all year long!

Become a Frequent Flyer today! Provide Tucson Audubon with a guarantee of regular, predictable funding we can use to respond to conservation, advocacy, restoration, and education needs.

It’s easy! Make a monthly gift to Tucson Audubon through your credit card or bank account. We’ll send you an e-mail confirmation each month, and a year-end annual giving statement in the mail for your tax purposes. Your membership automatically renews, so you’ll never miss an issue of the Vermilion Flycatcher!

Sandhill Cranes aren’t the only frequent flyers bringing joy to Southeast Arizona.

TUCSONAUDUBON.ORG/FREQUENTFLYERS
Keith Ashley, Development Director · 520-260-6994 · kashley@tucsonaudubon.org

Many thanks to our Birds Benefit Business Alliance Members, who show their support for Tucson Audubon’s mission through annual contributions and in-kind donations.

For more information about their businesses visit tucsonaudubon.org/ alliance.

PREMIERE ($5,000+)
Carl Zeiss Sports Optics
Splendido at Rancho Vistoso
Tucson Electric Power

LEADING ($2,500)
Birdwatcher’s Digest
Cornell Lab of Ornithology
Swarovski Optik
Tamron USA

SUSTAINING ($1,000)
Alexander | Carrillo Consulting
Beaumont & Port Arthur Convention and Visitors Bureau
Birding Ecotours
Crown Community Development-Arizona & Farmers Investment Co.
Diet of Hope Institute
Dr. Miguel A. Arenas, MD
Green Valley Pecan Company
Hatfield CPA LLC
Historic Y
Kimberlyn Drew, Realtor
Originate Natural Building Materials Showroom
Sabrewing Nature Tours
Vortex Optics

SUPPORTING ($750)
Solipaso Tours / El Pedregal Nature Lodge

CONTRIBUTING ($500)
Adventure Birding Company
AZ Birder Casitas
Bed and Bagels of Tucson
Desert Harrier
Visit Tucson
WINGS Birding Tours Worldwide

Know Someone Who Loves Birds?
Share the joy with a Gift Membership to Tucson Audubon.

We’ve made it easy to give a Gift Membership to a friend or family member. Just go to tucsonaudubon.org/join.

Thank you for supporting birds and birding in Southeast Arizona!


SOUTHEAST ARIZONA BIRDING FESTIVAL

AUGUST 5–9, 2020
Registration Opens April 1

Held at the DoubleTree by Hilton Hotel at Reid Park

Expert-guided birding, wildlife, and cultural field trips; photography and bird-ID workshops; free nature presentations, vendors, and activities

230 bird species seen in 2019!

Celebrate 10 years of finding life birds in Southeast Arizona!

TUCSONAUDUBON.ORG/FESTIVAL

MEET OUR FEATURED GUESTS:

ALVARO JARAMILLO

Alvaro Jaramillo, author of the *Birds of Chile*, leads international birding tours, as well as pelagic trips in central California. He was trained in ecology and evolution with an interest in bird behavior, and research forays introduced him to the riches of the Neotropics, where he has traveled extensively. Alvaro was recently granted the Eisenmann Medal by the Linnaean Society of New York—awarded for excellence in ornithology. He lives with his family in Half Moon Bay, California and owns the birding tour company, Alvaro’s Adventures.

Make plans to join Alvaro at his presentation on SATURDAY, AUGUST 8: THE BIRDER BRAIN

Birding is a lot of fun! It gets you outside, you meet great people, see gorgeous birds, and it works your brain! Most bird identification lectures focus on field marks and the specifics of separating species, but few ask exactly how we identify birds? Bird identification is complex—the trick is training your brain to do it like a professional. This presentation is a lighthearted and informative explanation of how the birder brain learns birds.
Tom has been birding since he was a kid under the tutelage of Dr. Arthur Allen of Cornell University. His articles and photographs are in museums and numerous publications including *Birding*, *Birdwatcher’s Digest*, and *Handbook of the Birds*. He has lectured and guided groups in the U.S. as well as Asia, and has participated in many competitive big day birding events. His latest book, *The Warbler Guide*, is published by Princeton University Press.

Have you ever wanted to get better at identifying warblers or learning bird songs? Join Tom at one of these opportunities:

**THURSDAY, AUGUST 6: HOW TO STUDY AND LEARN BIRD SONGS (AND MEMORIZE ANYTHING!)**

This presentation will cover many techniques that make it easier to identify and remember singing warblers and other species.

**FRIDAY, AUGUST 7: NEVER STOP LOOKING: WARBLERS FROM ALL ANGLES, AN ID WORKSHOP**

This talk discusses many of the important warbler ID points, such as overall contrast, facial features, color impressions, feather edging, rump contrast, tail and undertail covert patterns, and foraging style.

**SUNDAY, AUGUST 9: IDENTIFYING BIRD SONGS: A FIELD WORKSHOP**

During this field workshop, we’ll go over bird vocalizations of common species and discuss each song’s structure, quality, and other features that help us make an ID. Then we’ll apply these terms and criteria to all of the birds we find singing around us.

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**CONSERVATION FOCUS FOR THE 2020 SOUTHEAST ARIZONA BIRDING FESTIVAL:**

**THE SONOITA CREEK WATERSHED**

The Sonoita Creek Watershed acts as a wildlife corridor for over 200 riparian bird species, but it has suffered habitat degradation due to a history of mining activity, cattle ranching, and poor land use. Look for our new *Birding with a Purpose* field trips, workshops, events, and presentations focused on improving habitats for birds and protecting the beautiful Sonoita Creek Watershed.

*Raise awareness, find awesome birds, and make an impact with us this year during the Festival!*
Birds & Community is a new Tucson Audubon initiative aimed at reaching new audiences while maintaining connections with traditional ones. Our annual Lecture Series, now a part of Birds & Community, will provide Tucson-area residents with a new perspective on the world of birds and the work of Tucson Audubon. Lectures are scheduled in a variety of locations as a means of reaching as many community members as we can. Each date is an opportunity to meet face to face with fellow community members who share an interest in birds, or nature in general. Presentations, as always, remain open to the public and free of charge.

**The Santa Cruz: A River of Birds**
- Jonathan Horst
- February 1, 2020, 10—11 am
- Green Valley Recreation Desert Hills Center

Take a virtual journey down Southeast Arizona’s iconic Santa Cruz River. It’s one of the few waterways in the world that runs south, then north, and the only river in the U.S. to cross an international border twice. The forests flanking the Santa Cruz once sheltered beavers and grizzly bears; today the river is a major migration corridor, supporting over 200 bird species including the rare Rose-throated Becard, Gray Hawk, and Yellow-billed Cuckoo. Learn how the river is changing, and how to experience the bird community it supports.

**Hummingbirds: Tiny Messengers of Change**
- Keith Ashley
- March 7, 2020, 10—11:30 am
- Green Valley Recreation Desert Hills Center

**Hummingbirds: Tiny Messengers of Change**
- Jennie MacFarland
- March 19, 2020, 6:30—8 pm
- Tucson, Ellie Towne Flowing Wells Community Center

Join Tucson Audubon and members for a unique glimpse into the world of hummingbirds. This program will explore hummingbird mythology, basic biology, and all the places in the world they’re found. Attendees will take a deeper dive into the hummingbird species found in Southeast Arizona and learn what they tell us about our changing landscapes, waterways, and climate. Time will be reserved for answering attendees’ burning questions about hummingbirds—What’s the best food I can provide? How can you tell male and female hummingbirds apart? When is the best time to see them? And more!

**Adventures in Birding: Tucson**
- Eric Scheuering
- February 8, 2020, 10—11 am
- Tucson, Changemaker School

Birding offers a revolution in natural, cultural, and social experience. We are surrounded by feathered messengers in every hue of the rainbow, singing and flying. How can we help but take notice and really get to know them? Birding has become one of America’s most-treasured pastimes and may well hold the keys to bird conservation. Welcome to Southeast Arizona, one of the world’s birding hotspots. Where and how do you fit in?

**Counting Birds for Conservation**
- Olya Phillips
- January 11, 2020, 10–11 am
- PCC East Tucson

**Counting Birds for Conservation**
- Luke Safford/Keith Ashley
- January 23, 2020, 6:30—7:30 pm
- Oro Valley Community Center

Bird counts are the sturdy backbone of bird conservation. Without baseline knowledge of bird populations, it’s hard to know what’s happening. Which species are thriving, and which ones need our help? The Tucson Bird Count is the oldest urban bird census in the country. The Christmas Bird Count is the longest running. Understand the importance of these Community Science projects and how you can support them. Western Yellow-billed Cuckoos and Elegant Trogons are some of the birds you can count for conservation with Tucson Audubon.

**Rivoli’s Hummingbird, Freddie Huang**

**Santa Cruz River, Francisca Weber**

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BIRDAWHAT? BIRDATHON!

Every year as millions of birds are migrating north through Arizona, people join teams to spend a day spotting as many different species as they can—and fundraising to support Tucson Audubon.

WHO? You! Absolutely anybody can participate in this tradition begun in 1987. You can:
1. Join an Expert Lead Trip Team
2. Form Your Own Team
3. Donate to a Team

WHEN? April 7 to May 7, with a kickoff on Arizona Gives Day

WHERE? You can take the party anywhere on the planet you like. And speaking of parties, we wrap up Birdathon with a party that includes local beer, great food, a Gelato truck, games, and PRIZES.

WHAT? That’s right, PRIZES! And this year we are introducing several NEW 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.

Can we count on you to count birds with us this year?

TUCSONAUDUBON.ORG/BIRDATHON
**BEGINNING BIRDING**
March 6 & 13
Instructor: Eric Scheuering, Tucson Audubon’s Education Programs Manager
Fee: Tucson Audubon Members $75; Non-members $110

**INTRODUCTION TO BIRDING BY EAR**
April 2 & 4
Instructor: Homer Hansen
Fee: Tucson Audubon Members $125; Non-members $160

**INTERMEDIATE BIRDING BY EAR—BEYOND THE BASICS**
April 9 & 11
Instructor: Homer Hansen
Fee: Tucson Audubon Members $125; Non-members $160

**EL ARIBABI CONSERVATION RANCH: SONORA, MEXICO**
April 25–27 or May 2–4
Two trips this year to meet demand!
Have you been curious about exploring some of the rich and diverse habitats in Mexico just a short drive away but have been hesitant to take this trip on your own? Join us for a trip across the border for a two-night stay at El Aribabi Conservation Ranch along the lush Río Cocospera. We’ll explore this diverse and beautiful area located 35 miles south of the border where many of the tough to find specialty birds of SE Arizona are much easier to find. We’ll also enjoy an authentic taste of Sonora with meals prepared by a local cook.

Leaders: Jim Rorabaugh (both trips), Eric Scheuering (both trips), Luke Safford (April 25–27), and Gordon Karre (May 2–4)
Fee: $550 members // $650 non-members
Each trip is limited to 10 participants.

**TRINIDAD & TOBAGO**
June 11–19, 2020
Trip is FULL. Thanks for your great response!

**SOUTH AFRICA BIRDING AND WILDLIFE SAFARI**
October 1–10, 2020
Join Luke Safford and local experts as we explore one of the world’s most famous game parks, Kruger National Park, with Birding Ecotours! This massive park is teeming with Africa’s mammals and birds, including African Elephant, Giraffe, Lion, Leopard, Cheetah, Bateleur, Secretarybird, several species of rollers, bee-eaters, kingfishers, hornbills, vultures, owls, storks, and more—all spectacular and easy to see! This will be an adventure you will never forget!

Leaders: Luke Safford and local guides
Fee: R73,500 per person—shared room (prices in South African rand)
Trip limited to 7 participants.
FIELD TRIPS

Get to know your local hotspots on one of these trips that focuses on beginning birding. No birding experience required—all bird appreciators welcome! More information at tucsonaudubon.org/go-birding/birding-field-trips

NEW TRIPS!

KENNEDY PARK
Thursdays, January 2, February 6, March 5, 8:30–10:30 am.
Meet in the west parking lot near the lake which is accessed from S La Cholla Blvd. No registration necessary.

Located west of I-19 off of Ajo Highway, this park in southwest Tucson and its large lake attracts numerous waterfowl in winter making it a great place to learn your ducks. Vegetation around the lake attracts Bronzed Cowbirds, Yellow-rumped Warblers, and a variety of other species.

ISABELLA LEE NATURAL PRESERVE
Sundays, January 19, February 9, March 15, 8:30–10:30 am.
Meet in the dirt parking area on the northeast corner of the Preserve; from Tanque Verde Road take Bonanza Road south to the end of the road. Register online.

This preserve, at the confluence of Agua Caliente and Tanque Verde washes in northeast Tucson, is a mesquite bosque providing year-round habitat for resident and migrating birds. Join us for this listen and locate treasure hunt!

AVRA VALLEY: HAWKS FOR BEGINNERS (IN THREE LANGUAGES)
January 26, 8 am.
Meet at the Mission Library parking lot on the NW corner of Mission Rd and Ajo Way. No registration necessary.

The Tohono O’odham and Hispanic people of southern Arizona were looking at birds and giving them names long before the English-speakers showed up. As we look for wintering raptors, we’ll try to identify them in all three languages. There will be a scope, hawk ID charts and tri-lingual bird lists.

AND CHECK OUT THESE OTHER COMMUNITY-FOCUSED FIELD TRIPS! THEY’RE FREE AND OPEN TO ALL WITH NO REGISTRATION NECESSARY.

SWEETWATER WETLANDS
Every Wednesday, January-February (8 am), March-April (7 am).
Meet at 2511 W Sweetwater Dr.

ORACLE STATE PARK
Fridays, January 3 & 10, February 7 & 14, March 6 & 13, 8:15 am.
Meet at Ranch house parking lot.

MAISON CENTER/ARTHUR PACK PARK
Every Saturday in January & February and March 7 & 21, 8 am.
Meet at the Mason Center (3835 W. Hardy Rd.) on the corner of Hardy and Thornydale in NW Tucson.

ARIVACA CIENEGA
Saturdays, January 4, February 1, March 7, 8 am.
Meet at the Arivaca Cienega Trail, 1/4 mile east of Arivaca.

ATTURBURY WASH
Tuesdays, January 7 (8 am), February 4 (8 am), March 3 (7 am).
Meet at the parking lot at Lower Lincoln Park, 8280 E Escalante Rd.

MISSION GARDEN
Thursdays, January 9 (8 am), February 13 (8 am), March 12 (7 am).
Meet at Mission Garden, 946 W Mission Lane (just east of Grande Road on Mission Lane).

UNIVERSITY OF ARIZONA CAMPUS
Saturdays, January 11 (8 am), February 15 (8 am), March 14 (7 am).
Meet at the University of Arizona Main Gate at University & Park.

KINO ENVIRONMENTAL RESTORATION PROJECT AT SAM LENA PARK (KERP)
Tuesdays, January 14 (8 am), February 11 (8 am), March 10 (7 am).
Meet at the ramadas adjacent to the ballfields, 3400 S Country Club Rd.

SANTA CRUZ RIVER HERITAGE PROJECT
Tuesdays, January 21 (8 am), February 18 (8 am), March 17 (7 am).
Meet at the Paseo de las Iglesias parking lot on the west side of the river on S Cottonwood, just south of W Silverlake.
VOLUNTEERS

We cannot say enough to show our gratitude to our dedicated, hardworking volunteers. They are the lifeblood of this organization, and truly effect change in every corner of Tucson Audubon from conservation to engagement to advocacy.

Volunteers, remember, you are part of a larger voice making a difference in our community. Thank you for everything you do! The volunteers named here deserve special recognition for their past and current work with Tucson Audubon. Be sure to give them an extra “thank you” next time you see them!

The following list is a work in progress. We don’t want to miss anyone, so please let Luke Safford (lsafford@tucsonaudubon.org) know if a name is missing or hours are incorrect!

ACTIVE VOLUNTEERS WITH OVER 5,000 RECORDED HOURS:
Kathy Olmstead (1982)
Thomas Rehm (1982)
Jean Rios (1993)
Ruth Russell (1978)

ACTIVE VOLUNTEERS WITH OVER 2,500 RECORDED HOURS:
Alexia Bivings (1995)
Tim Helentjaris (2010)
John Higgins (1986)
Lorel Piccuirro (1998)

ACTIVE VOLUNTEERS WITH OVER 1,000 RECORDED HOURS:
Susan Atkisson (2016)
Sharon Bale (2010)
Pete Bengtson (2011)
Rosie Bennett (2007)
Les Corey (2013)
Lynn Hassler (2013)
Liz Harrison (2005)
Chris McVie (2013)
Cynthia Pruett (2010)
Deborah Vath (2009)
Bruce Ventura (2018)
Jim Watts (2011)

ACTIVE VOLUNTEERS WITH OVER 500 RECORDED HOURS:
Clifford Cathers (2009)
Andrew Core (2010)
Laura Cotter (2007)
Phil Creighton (2015)
Francie Galbraith (2016)
Jim Gessaman (2010)
Kathleen Heitzmann (2015)
Jean Hengesbaugh (2010)
Mark Hengesbaugh (2010)
Bob Hernbrode (2011)
Marty Jakle (2017)
Barbara Johnson (2013)
Keith Kamper (2017)
Jill Kelleman (2013)
Thor Manson (2016)
Sherry Massie (2013)
Ann Mavko (2013)
Julie Michael (2018)
Ken Murphy (2014)
Brian Nicholas (2013)
Brad Paxton (2010)
Kirk Stitt (2017)
Linda Stitt (2017)

ACTIVE VOLUNTEERS WITH OVER 500 HOURS IN 2019:
Tom Swenson-Healey (2017)
Frannie Tourtellot (2013)
Mary Walker (2015)

ACTIVE VOLUNTEERS WITH OVER 250 HOURS IN 2019:
Susan Atkisson
John Hughes
Chris McVie
Julie Michael
Bob Perna
Mary Walker

ACTIVE VOLUNTEERS WITH OVER 100 HOURS IN 2019:
Pete Bengtson
Nancy Bent
Jasbir Bhangoo
Anne-Laure Blanche
Malcolm Chesworth
Andrew Core
Kasey Fry
Francie Galbraith
Jim Gessaman
Lynn Hassler
Kathleen Heitzmann
Jean Hengesbaugh
Bob Hernbrode
Becky Hiser
Daryl Hiser
Marty Jakle
Keith Kamper
Ken Lubinski
Thor Manson
Pam Mowbray-Graeme
Kathy Olmstead
Bob Orenstein
Lenore Perna
Lorel Piccuirro
Cynthia Pruett
Tom Rehm
Jean Rios
Kirk Stitt
Linda Stitt
Tom Swenson-Healey
Frannie Tourtellot
Cynthia VerDuin
Jim Watts

Volunteers at Southeast Arizona Birding Festival 2019; Ken Kinsley; both by Joanna Strohn
GIFTS IN HONOR OR MEMORY OF

In honor of Barb Tracy from Chris & Ron Medvescek
In memory of Bruce C. Wheeler from Amy MacLeod
In honor of Canny Clark from Susan Clark
In honor of Deb Vath from Jill & Fred Vath
In memory of Dorothy Baum from Pam & Pete Baum
In memory of Erin Smith from Harvey Smith
In memory of Hazel & Herb Judd from Mike Judd
In memory of Jeanne Rassieur Casey from Leslie Carter
In honor of Judith Kleinfeldt from Laurie Neidich
In honor of Julia Gordon from Gale Harris
In honor of Karen & Tim Morey from Bill Wardlow
In memory of Karl Mattes from Jenny & Shane Burgess and Bethany Rutledge
In memory of Mae Fuller from Chris DeLong
In memory of Martha McKibben from Emmett Lyne and Ronald Schlegel
In honor of Mary Jo Ballator from Andréé Tarby and Karen LeMay & Bob Behrstock
In honor of Pat Isaacson from Daniel Isaacson
In memory of Ralph Van Dusseldorp from Linda Johnson, Paula Dunn, and Marilyn Van Dusseldorp
In honor of Robert Merideth from Gregg Garfin
In honor of Robin Kaminsky from Vicki Schiller
In memory of Ruth & Walter Hileman from Karen & Gilbert Matsushino
In memory of Shirley Deering from Maureen & Terry Houlanah
In memory of Valerie Greene from Linda Greene
In memory of Wayne Collins from Elen Blackstone

Lark Sparrow, Dan Weisz
BEAUMONT, TEXAS is the best place to stay when birding High Island. Located on the upper Texas Gulf Coast, with four distinct habitats (woods, wetlands, marsh, and shore), Southeast Texas is a place of contrast where you can experience everything from piney forest to coastal plains, a home to a variety of endemic species from shorebirds to tree-dwellers.

- Close to 400 bird species are spotted in and around Beaumont annually—including High Island, so you’re all but guaranteed to check more than a few off your life list.
- Sabine Woods is one of the premier birding spots in North America. Spy everything from Golden-Winged Warblers to White-Tailed Kites, and Indigo Buntings.
- Anahuac NWR is one of the premier waterfowl refuges on the Texas coast; the endless marshes are home to all of the regular rails in the US.
- Sea Rim State Park is where the marsh meets the surf, making it prime binocular-hunting grounds for numerous species.

Beaumont, Texas is located on two of the four migratory flyways in the U.S., the Central and Mississippi. Thanks to its unique position near the Gulf of Mexico, there are 28 Great Texas Coastal Birding trails within a 40-mile radius of the city. The American Birding Association called it one of the most interesting avifaunal confl uences in the country. For beginning birders, it’s a fantastic place to practice identifying wading birds and ducks. For advanced birders, this eastern Texas coastal region presents a number of unique and intriguing ID challenges due to range overlaps not present elsewhere. And for photographers, Beaumont is as good as it gets.

Request a free Birder's Planning Kit 1-800-392-4401 | VisitBeaumontTX.com/birding
FROM THE EXECUTIVE DIRECTOR

ALL TOGETHER NOW

Our winter appeal features the slogan, All Together, We Are Southeast Arizona. For those following and interacting with Tucson Audubon’s social media channels, I hope you’ve enjoyed seeing the slogan in tandem with our designer’s handsome Elegant Trogon illustration. Likewise, we hope you’ve found a visible home for your All Together… Trogon sticker, whether it be on a reusable bottle or mug, or the back window of your birdmobile.

The appeal concluded with the sentiment that all together, we will fail or we will fly. As our board and staff begin implementing a new strategic plan in 2020, we have strong intentions to be a more inclusive organization, reach a more diverse audience, and create opportunities for more residents and visitors to be inspired by birds in Southeast Arizona. We truly believe that the future of birdlife in our region will be determined by the actions of our entire community.

Finally, I hope you’re as thrilled as I am about this fresh-look Vermillion Flycatcher. Our renewed approach to Tucson Audubon’s quarterly news magazine is indicative of how we’re building meaning and continuity into everything we do—from communications streams to education programs, from restoration projects to advocacy campaigns. I hope you’ll consider supporting these changes with a sustaining monthly gift by becoming a member of our Frequent Flyers program. To join this growing community, please visit: tucsonaudubon.org/frequentflyers.

Best Regards,

Jonathan E. Lutz,
Executive Director
The Vermilion Flycatcher is the newsletter of the Tucson Audubon Society, a chapter of the National Audubon Society. National Audubon Society members and members of other chapters may receive the Flycatcher by becoming a Friend of Tucson Audubon. For more information visit: tucsonaudubon.org.

SHOPPING IS FOR THE BIRDS

A conscientious consumer is an agent of change who considers the social, environmental, ecological, and political impact of the merchandise they buy and the places they choose to buy from. The Nature Shop carries a variety of items that are reusable, sustainably made, environmentally friendly, educational, and celebrate a love of nature. All sales support the important work that the Tucson Audubon Society is doing in Southeast Arizona to build a better world for birds.

When you support your local Tucson Audubon Society you are supporting birds and bird habitat conservation. Thank you!

MAIN SHOP
Monday–Friday, 10 am–4 pm
Saturday, 10 am–2 pm
520-629-0510 ext. 7015
300 E University Blvd #120, Tucson 85705
(corner of University & 5th Ave.)

AGUA CALIENTE PARK SHOP
NOTE: The Nature Shop at Agua Caliente Park is currently closed until further notice due to Shop and Park renovations.
520-760-7881
12325 E Roger Road, Tucson 85749
Nature Shop space generously provided by Pima County Natural Resources, Parks & Recreation

When you need a book, think of Tucson Audubon’s Nature Shops first! Support your local bookstore.