Vermilion FLYCATCHER

April-June 2019 | Volume 64, Number 2





MISSION

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

TUCSON AUDUBON SOCIETY

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Olya Phillips, Citizen Science Coordinator

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NATURE SHOPS

To shop online or for more information on our University Boulevard and Agua Caliente Park Nature Shops, please visit tucsonaudubon.org/nature-shop

NATURE CENTERS

Mason Center 3835 W Hardy Rd Tucson, AZ 85742

Hours: Open most weekdays 9 am-5 pm or when chain is down

Paton Center for Hummingbirds

477 Pennsylvania Ave Patagonia, AZ 85624 520-415-6447 Hours: Open sunrise to sunset

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FRONT COVER: @ Jim & Deva Burns, Scottsdale, AZ. To see more of their work visit jimburnsphotos.com.

Simply Marvelous

As I'm typing, the latest comic book film, *Captain Marvel*, is debuting across the country and poised to break the box office in its opening weekend. The basic plot: a female lead character becomes Captain Marvel after Earth is caught in the middle of a cosmic conflict between two alien worlds. The film will be the first offering from Marvel Studios to be directed by a woman and the first to feature a female superhero in the lead. As a result, the cultural significance of Captain Marvel is expected to entice viewers who wouldn't normally be attracted to a superhero story. Count me in as part of this audience.

We've been thinking a lot about Tucson Audubon's audience these past few months—from our core supporters, to members of our community who are less engaged with local birds. Southeast Arizona hosts one of the greatest diversity of bird species in the United States. Through a new marketing effort, Tucson Meet Your Birds / Conoce Tus Aves, we'll be welcoming all Tucsonans to access the world of birds in a few simple ways:

- 1. Attend one of Tucson Audubon's many free, no-registration-required bird walks.
- 2. Visit one of two Tucson Audubon Nature Shops and enjoy a complimentary copy of the Vermilion Flycatcher.
- 3. Learn about birds online via the brand new address, tucsonbirds.com.

Our members already know this, but it bears repeating: Tucson Audubon Society is more than just a birding club. During the first fiscal quarter of 2019, Tucson Audubon continued to fight against the planned Vigneto development that's poised to harm the San Pedro River, we teamed up with furloughed National Parks Service staff to restore a floodplain property along the lower Santa Cruz River, and we worked with volunteers to build and distribute hundreds of Lucy's Warbler nest boxes. Birding recreation remains a core focus of our workfrom our award-winning retail operation to our beginning birding workshops—and Tucson Audubon remains committed to the conservation and restoration of bird habitat throughout southeast Arizona.

Education features prominently in the Tucson Audubon mission, and we're breathing new life into our educational offerings. Thanks to a special gift from the Richard Grand Foundation, we're making positive changes to Tucson Audubon's popular field trip and workshop programs, striving to create a long-term, financially sustainable program. Throughout the year, we'll be making steady progress toward building more educational opportunities for students, teachers, and volunteer educators. If you would like to become involved or have an idea for a class or workshop, drop us a line: education@tucsonaudubon.org.

Leading the effort to "inspire people to enjoy and protect birds" is our dedicated Board of Directors. Tucson Audubon members elected three new leaders to the Board of Directors in March: Colleen Cacy, Bob Hernbrode, and Keith Kamper. Colleen is an attorney specializing in estate planning; Bob is a retired biologist and Arizona National Resources Commissioner; and Keith, a dedicated conservationist, is regarded as one of the most skilled birders in our region. Take a moment to visit tucsonaudubon.org and read the full bios of our newest board members.

New faces and new ideas make for a stronger, more effective Tucson Audubon. The work we're doing every day to be a more open and welcoming organization will pay dividends for birds and habitat. The progress we're making in 2019 is already attracting community members who wouldn't normally connect with Tucson Audubon, which I find simply marvelous.

Keep 'em flying,



Jonathan E. Lutz, Executive Director





READY, SET, BIRD!

Migrant hawks soaring up the Santa Cruz. Curve-billed Thrashers singing their hearts out from prickly perches. Hummingbirds dancing their crazy displays in the sky... They're all getting ready for Birdathon! Are you?

Help us surpass our goal of \$35,000! Please support Tucson Audubon's **annual community fundraiser** in a way that makes you soar, sing, and dance as well.

Join an expert-led trip

Create your own team

Donate to a team

APRIL 7-MAY 7

For a full 30 years Southeast Arizona has come together to support Tucson Audubon's Birdathon—a community fundraising tradition since 1987!

WHAT IS BIRDATHON AND HOW DO I PARTICIPATE?

Birdathon is an opportunity to enjoy Southeast Arizona's birds while raising or donating critical funds to the Tucson Audubon Society. As a participant you can gather pledges or donations. You can hold a "traditional" Birdathon and count as many species as possible during a 24-hour timeframe, or you can organize your Birdathon more creatively. Prizes are awarded for a number of categories. You can also participate by leaving the planning to Tucson Audubon and joining one of our expert-led trips:

- April 16 Here Today, Trogon Tomorrow with Eric Scheuering: Madera and Florida Canyons
- April 17 Sweetwater Junkies with Luke Safford: Sweetwater Wetlands
- April 20 Owlympians with Jennie MacFarland: Tubac south
- April 26 **Agua Caliente Birdbrains with Liz Harrison and Dick Carlson**: Agua Caliente Park
- April 27 Scott's Orioles with Scott Olmstead: Mt. Lemmon

tucsonaudubon.org/birdathon

What Our Birds Are up to April through June

Matt Griffiths

Tucson just had its largest snow fall in years but it's time to think about one of the best birding times of the year: spring! Vegetation in the Sonoran desert has benefitted from a fairly wet winter and has now bounced back to life. Palo verde and mesquite trees are putting on a flower show along with countless annual plant species. Hackberry and wolfberry will soon be full of fruit and deciduous trees in the Sky Islands are leafing out.

What better time for our breeding birds to return to the region! Fruit and nectar are available and insects abound in a veritable smorgasbord of food that will continue all summer with a little

help from monsoon rains (OK, maybe a lot of help!). Birds are everywhere, from the thickets of a desert river to a shady, Douglas fir-covered high elevation canyon.

With so much going on in the many life zones that exist in southeast Arizona, how do you take all this in? Is there any hope? Luckily, especially for those of us right in Tucson, there is an easy way to drive "from Mexico to Canada" in about an hour—the Catalina Highway on Mt. Lemmon! Spending a day exploring the whole of Mt. Lemmon—its many habitats, birds, and scenic wonders—is something every local and visiting birder should do.

HIGHLIGHTS FOR BIRDING MT. LEMMON



Sonoran Desert

Beginning your journey on the lower slopes of the mountain, you'll find yourself in classic saguaro cactus habitat brimming with Curve-billed Thrashers, Black-tailed Gnatcatchers, Gila Woodpeckers, and Gambel's Quail. Try to find a Gilded Flicker on Soldier Trail, or hit Sabino Canyon National Recreation Area for a desert riparian experience and a whole host of other birds such as Summer Tanager or Brown-crested Flycatcher.



Madrean Oak Woodland/Grassland

It won't be long before you've made it to Molino Basin or the Gordon Hirabayashi Campground in the oak and upper Sonoran grassland zone. Here you'll find Scott's and Hooded Orioles, Montezuma Quail, or an elusive Gray Vireo. For more extensive oak and juniper habitat, try the north side of Mt. Lemmon (Oracle State Park) for really good chances at Woodhouse's Scrub Jay and Crissal Thrasher, or Redington Rd. to find the rare in Tucson Juniper Titmouse.



Pine/Oak Forest

If those aren't enough birds already, keep going! The Bear Canyon picnic areas and Hitchcock Campground host new discoveries in the tall pines mixed with oak. Listen for the buzzy warble of a Black-throated Gray Warbler, or the high pitched whistle of a Dusky-capped Flycatcher. White-breasted Nuthatch, Bridled Titmouse, and Plumbeous Vireo can usually be spotted flitting nervously about. On a good day, you'll find Arizona Woodpecker or a Hepatic Tanager.



Pine/Fir Forest

You've made it to the top of the mountain where pines mix with fir and Hermit Thrush song fills the air. Rose Canyon Lake is a great place to look for specialty birds such as Red-faced and Grace's Warbler, Buff-breasted Flycatcher, and a recently-nesting Common Black Hawk. If you've brought your camping gear along, spend the night here to give yourself a better chance at finding a Greater Pewee perched atop the tallest Ponderosa pine around. You'll probably hear it sing "Jose Maria" before you see it.

Cactus Wren, Roger van Gelder; Scott's Oriole, @bryanjsmith; White-breasted Nuthatch, Rhett Herring; Grace's Warbler, Jackie Bowman

Spotlight on Education Eric Scheuering, Education Programs Manager

Tucson Audubon has a long and rich history of providing educational programming and we're excited to be reviving those traditions in 2019. The generosity of an individual donor makes my position possible and allows Tucson Audubon to begin building the foundations of a strong and diverse education program. My goal is to support existing programs, while reaching new audiences.



Spreading the love of birds at Sweetwater Wetlands every week.

I've been sharing my love for birds with people for over 25 years. I began my career as a wildlife biologist in Oregon, working for federal and state agencies, including Malheur National Wildlife Refuge. Later, after earning a master's degree in science education, I taught middle school science for five years, and then in 2014 joined the staff of the Audubon Society of Portland (OR) managing education programs, teaching a variety of bird-related classes, and leading birding trips, both locally and around the world. In early 2018 I moved to Tucson to work as an environmental educator for Pima County before coming to Tucson Audubon.

As we begin to revitalize some of Tucson Audubon's rich educational endeavors of the past, my intention is that we provide opportunities for every member of the community to engage with the world of birds. We want to reach a broader and more diverse audience and have more people immersed in nature.

To make this happen we will need to strengthen existing partnerships and build new ones. We will create programs that highlight and support the work we're already doing—from advocacy to research. We will build relationships in the community at multiple scales. We envision the result of this effort will be a stronger Tucson Audubon that creates greater community-wide awareness for protecting birds in our southeast Arizona communities.

Our Field Trips have long been the foundation of our outreach efforts. These programs give people a chance to engage with volunteers and staff and may also be the only time, or first time, that someone interacts with Tucson Audubon on a face-toface level. We will continue to offer a wide variety of field trips, including offering more local, urban walks that are accessible to a broader array of people.

Our offerings of Classes and Workshops will provide opportunities for everyone from beginners to intermediate and advanced birders. To capitalize on our "Tucson Meet Your Birds" campaign, I'll be offering a beginning birding class throughout the year, with a focus on introducing people to the local and common birds of Tucson.

Our new Birding Excursions will take people to interesting destinations to see new birds. These multi-day trips will give people a chance to explore different habitats and learn about the birds and all of the animals and plants that live there. Participation in these trips will support our education programs, including youth programs that get kids outdoors.

As an example, I recently had the opportunity to assist our conservation and citizen science staff in building Lucy's Warblers nestboxes with students at Ochoa Community School. For me, this was a deeply rich and rewarding experience. These students were not only engaged and enthusiastic, but also appreciative of this opportunity to connect with nature. The possibilities are nearly endless for us to build on activities like this.



Educating youth about Lucy's Warblers and their nestboxes, Olya Phillips

Our goal in the coming months and years is to have kids comparing notes about their backyard Lucy's Warbler nestboxes with each other at school, and to have every new birder say "I learned about birding from Tucson Audubon." We hope to get more people conversing about birds with one another as part of their daily lives. Birds are all around us all over the world. That's especially true here in southeast Arizona and we want to continue inspiring people to enjoy and protect birds.

Upcoming Classes

Wondrous World of Warblers

Thursday, August 15, and Saturday, August 17
Warblers are some of North America's smallest birds, and are known for their wide variety of colors and long migrations from South America and the West Indies to northern Canada and back. Their rapid movements from branch to branch and behind leaves can make identification challenging. This workshop will cover key structural characteristics, comparisons with similar species, and vocalizations of the fall warblers of southeast Arizona.

Instructor: Homer Hansen

Fee: Tucson Audubon Members \$125;

Non-members \$160



Yellow-rumped Warbler, Lois Manowitz

Flycatchers of Southeastern Arizona

Thursday, September 5 and Saturday, September 7

This workshop introduces you to the diverse family Tyrannidae and highlights the ways to separate the kingbirds, pewees, empids, and flycatchers of southeast Arizona. The workshop will focus on generic and species-specific structural and plumage characteristics with a brief introduction to vocalizations for a few of the species.

Instructor: Homer Hansen

Fee: Tucson Audubon Members \$125;

Non-members \$160

See tucsonaudubon.org/education for more info, including additional classes, and to register.

Upcoming Field Trips

Sweetwater Wetlands

Every Wednesday (7 am in April; 6 am May-August)

Mission Garden

2nd Thursday of the month (8 am in April, 7 am in May & June)

Explore this reconstruction of the four-acre 18th-century garden at the base of "A" Mountain that was associated with the Mission San Agustin. This walk is good for beginning birdwatchers, gardeners, and those interested in attracting birds to their yards.

Oracle State Park

Friday, April 5 and 26 (8:15 am)

Have you visited this little-known Arizona State Park near the town of Oracle? The higher elevation here provides an opportunity to see some new species such as Woodhouse's Scrub-Jay and Crissal Thrasher.

Mason Center/Arthur Pack Park

Saturdays, April 6 & 20 (7 am), May 4 & 25 (6:30 am)

An introduction to birdwatching basics and our Mason Center. Start with feeder-watching followed by a stroll to Arthur Pack Park along the trails with views of the golf course pond.

Boyce Thompson Arboretum

Thursday, May 16

Boyce Thompson Arboretum is one of the jewels of the Arizona State Parks system and the birding usually presents a rainbow of summer residents, including some orioles, tanagers, and grosbeaks, along with familiar desert species and an occasional surprise on Ayer Lake. Arboretum entrance fee: \$15.

Pinal Mountain

Monday, June 3

Start outside of Globe for a journey up through a variety of habitats to top out about 7,800 feet to look for possible Olive Warblers, Red-breasted Nuthatches, and Broad-tailed and possible Rivoli's Hummingbirds.

See tucsonaudubon.org/fieldtrips for more info and to register for these trips.



Boyce Thompson Arboretum, Bud Ellison



Woodhouse's Scrub Jay, Dan Weisz

See New Birds and Travel to Interesting Destinations on One of Our New Birding Excursions!

These multi-day (occasionally single day) trips provide the opportunity to explore different habitats and learn about the birds, other animals, and plants found there. Experienced leaders will help you get the most out of your trip while at the same time promoting the welfare of birds and their environment. We offer trips throughout the southwestern United States, northern Mexico, and beyond.

Your travel dollars support our education programs, including youth programs that get kids outdoors, and allow us to offer programs to a broader and more diverse audience.

The following is included in the cost of the trip:

- · Ground transportation as noted in the itinerary
- Double-occupancy lodging for the dates of the program
- Meals (except most dinners)

- · Fees for planned activities
- · Educational services of the trip leaders and local guides

Visit tucsonaudubon.org/excursions for details or contact Education Programs Manager Eric Scheuering (520 629-0510 x7009) with questions.



Elegant Trogon, Frank Retes

Salton Sea, Nateab

Chiricahua Mountains, Arizona May 31-June 2, 2019

On this three-day trip, we'll explore the variety of habitats and hope to find many of the bird species of this famous hotspot of avian diversity. This is one of the most reliable and easily-accessible spots in the U.S. to find Mexican Chickadee and Blue-throated Hummingbird. Other species we hope to see include Montezuma Quail, Elegant Trogon, Sulphur-bellied Flycatcher, and various warblers (Virginia's, Grace's, Olive, and Red-faced), as well as Mexican Whip-poor-will and Whiskered Screech-Owl. We'll make a stop in Willcox to take a quick look for lingering waterfowl and shorebirds.

LEADERS: Luke Safford and Eric Scheuering

FEE: Tucson Audubon Members \$550; Non-members \$650

Sonoita Grasslands & Vineyards, Arizona September 28, 2019

In sharp contrast to the cactus-filled Sonoran Desert, this unique high desert grassland provides habitat for many avian species, including up to 14 species of sparrow. Here we can find various sparrows (Cassin's, Botteri's, Grasshopper Sparrows), "Lilian's" Eastern Meadowlark, Loggerhead Shrike, and White-tailed Kite, as well as riparian-associated species, including Gray and Zone-tailed Hawks. We'll make a stop for lunch and a wine tasting, both included in the fee.

LEADERS: Luke Safford and Eric Scheuering

FEE: Tucson Audubon Members \$150; Non-members \$185

Salton Sea, California October 18-20, 2019

This modern sea is an otherworldly landscape that is a haven for a wide variety of birds, including waterfowl, waterbirds, and shorebirds, and supports one of the most diverse avian compositions in the United States. On this three-day trip we'll search for Ridgway's Rail, American and Least Bittern, White-faced Ibis, Sandhill Crane, and other numerous herons and egrets. Shorebirds include Marbled Godwit, Long-billed Curlew, sandpipers and dowitchers, and with some luck, Mountain Plover. Another unique species found here is the Yellow-footed Gull, as well as possible Black Skimmers.

LEADERS: Luke Safford and Eric Scheuering

FEE: Tucson Audubon Members \$595; Non-members \$795

Bosque del Apache, New Mexico December 5-8, 2019

LEADERS: Luke Safford and Eric Scheuering

FEE: Tucson Audubon Members \$750; Non-members \$950

Tucson Bird Count 2019— Urban Birding to Benefit Birds Jennie MacFarland, Tucson Bird Count Coordinator





Costa's Hummingbird, Jim Burns

To find many of the iconic bird species of southeast Arizona, birders head to remote areas such as Madera Canyon. However, many of our most wanted species for visiting birders, such as Gila Woodpecker, Cactus Wren and Gambel's Quail, live in our urban settings.

So why is urban habitat so attractive to so many species? In short it is because urban areas can provide an abundance of food sources for native birds. Landscaping can have lots of fruit-producing plants, such as hackberry, wolfberry, and pyracantha. There is also sometimes more insect prey for birds in an urban setting because of the extra water these landscapes receive, and some folks supplement the natural food supply with feeders. On the other hand, urban areas often have "dead zones" of empty dirt lots and parking lots in Tucson that barely support anything, let alone native birds.

The Tucson Bird Count is a citizen science project that began at the University of Arizona in 2001 and has been coordinated by Tucson Audubon for the last seven years. The goal of the count is to determine what parts of Tucson are utilized by native birds and what parts are not, and then use this information to determine what features make urban habitat as useful as possible to native birds. With this information we can continue to make Tucson a more productive urban habitat. This effort has already begun with the five "recipe cards" for bringing native birds into your yard; these cards can be picked up at our Nature Shop.

We need experienced birders who can easily identify Tucson area birds by sight and sound to volunteer as counters for this bird survey. You can adopt a route of your choice and survey it any morning between April 15 and May 15. To see available routes and get more information please visit tucsonbirds.org.

Students "Save Several Birds with Many Stones" at Local Park

Andy Bennett, Restoration Project Manager

What on earth do flooded streets, frustrated high schoolers, and bird habitat have in common? Add sweltering sidewalks and our local Tucson Water utility to the mix and you may really be scratching your head. Well, fear not—we're about to tie all of these elements together into an interesting story of collaboration and youth leadership.

Changemaker High School sits just a block from a neighborhood drainage system dubbed Swan Wash, which flows west through Swan Park. During and following rains, the wash tended to back up and flood the street and sidewalks used by students to walk to school each day. After many a day of soaked sneakers, the students and their teachers got organized and approached the City of Tucson about the issue, eventually garnering the approval of a pedestrian bridge.

Around the same time, the students were also engaged in mapping the tree canopy of neighborhoods around the school and discovered that the county deemed these neighborhoods high priority areas for addressing the urban heat island effect:

essentially, these areas were hotter than most in Tucson due to the effects of location, lack of tree canopy, and dense urban development. The urban heat island can be a health and safety issue in economically-challenged neighborhoods like those around the school, as people in these areas may not have the means to stay cool in the summer or to water large trees that provide shade. Look at any aerial map of Tucson and you'll notice this pattern of lack of tree cover and economics.

The students realized that addressing the flooding and urban heat island at Swan Wash were the same battle. With help from Tucson Audubon, Changemaker applied for and won a grant from Tucson Water's Conserve2Enhance program to create perhaps the largest rainwater harvesting project in Tucson. Changemaker brought in Tucson Audubon to consult on the design and construction, together building three massive rainwater harvesting basins to slow and soak in floodwaters. The students and community members planted the basins with native species, thus solving the flooding problems and creating bird habitat and shade.

Volunteer Growth and Training Events— Plan on Attending! Luke Safford, Volunteer Coordinator

With more than 400 active volunteers, and 20 new volunteers on board already in 2019, Tucson Audubon's volunteer program is growing! Our desire is not just for the program to expand, but for each individual volunteer to grow and develop with continued learning and equipping. Throughout the year we will have Volunteer Growth and Training classes that we encourage all of our current and prospective volunteers to attend. We will cover the foundational elements of volunteerism within Tucson Audubon, which will help all of us become better at "inspiring people to enjoy and protect birds." If you are a current or prospective Tucson Audubon volunteer please plan on attending one class in 2019. Classes will be held at the Tucson Audubon Main Office, 300 E University Blvd. Why not come in April? RSVP to Luke Safford, lsafford@tucsonaudubon.org.

April dates:

Tuesday, April 16: 3-5 pm

Thursday, April 25: 10 am-12 pm

More than 75 volunteers and staff enjoyed a day in the park celebrating all the accomplishments of our volunteers in 2018, which included over 14,000 recorded volunteer hours! Volunteer field trip leader Prudy Bowers celebrates winning a Lucy's Warbler nest box at the Volunteer Appreciation BBQ.

"Living with Nature" lectures in Green Valley regularly draw over 100 folks and it is volunteers like Jan Ajemian who make them all feel welcome. Here Jan and Ana Gonzalez share a laugh together as they prepare for the "Living with Nature" program.



Bob and Prudy Bowers with a Lucy's Warbler nest box, Joanna Strohn



Ana Gonzalez (left) and Jan Aiemian, Joanna Strohr

If you would like to learn more about current volunteer opportunities and to start volunteering with Tucson Audubon, please email Luke Safford at lsafford@tucsonaudubon.org.

SOUTHEAST ARIZONA'S BIRDING HOTSPOTS IN THE PALM OF YOUR HAND!

BIRDING SOUTHEAST ARIZONA APP

Search by bird or site, and get easy driving directions. Detailed site info and access to Audubon's online bird guide included.

Developed by Southeastern Arizona Bird Observatory and Tucson Audubon Society.

iOS or Android. Learn more at tucsonaudubon.org/app



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!

Welcome New Members

Gabrielle Accatino, Harvey Adelberg, Ian Adrian, Joanne & Chris Aeschliman, MaryAnn Akers, Kristin Almquist, Jon Andrew, Loren Bach, Christine Basso, Cathy Becskehazy, Suzanne Benedict, Lou Ann & John Bieging, Maureen Bike, Jill Bland, Marlene Bogen, Mary Bradshaw, Virginia Brier, Jo Ann Brisbine, Charles Bufe, Colleen Cacy, Brian Ceccon, Marion Cimmino, Martha & Hobart Collins, Elise Cotler, Bruce Coull, Stephen Curry, Guy David, Stan DeOrsey, Norm DeWeaver, Ava & Dan Dorrance, Donna & Tom Edmonds, Lynda & Allen Estes, Dana & Richard Filley, Betty & Robert Forrest, Liz Fox, Denise Frank, Lorraine Garreau, Bonnie Gill, Petrina Gee-Gillett & Larry Gillett, Jerry Gonville, Julie Hallbach, Sarah Brown & Melissa Hare, Deb Harris, Janet Hart, Gretchen & Donald Hegeman, Sandi Hempelmann & Vic Nelson, Bruce Henneberg, Kay Henshaw & John Gilmore, Patti Henshaw, Jeannie & Jim Hicks, Jenny Hoit, Glen Holdren, Mabel Houghton, C. Huerta, Joe Huntsman, Linda & Dave Hydukovich, Mark Jennings, Sabine & Volker Jeschonnek, Carol & Gregory Johnson, Dianne & John Johnson, Pat Johnson, Shannon & Brian Jones, Debbie Keller & Janie Hill, Karen Kelly, Nancy Knight, Susan & Rich Knutson, Jessica Lamberton, Catherine Larson & Shelley Phipps, Melissa Lawrence, Bridget & Ross Levin, Carol Loomis, Erin Lubeck, Sara & Ken Lubinski, Steve Lynch, Amy MacLeod, Faulene Main, Lisa Martin, Richard Martin, Allan Mattson, Kathleen McCoy, Richard McDonnell, Linda McFarlane, Cindy Miner, Diana Moore, Richard Moore, Ronen More, Barbara Morris, Ted Mouras, Bonnie Murphy, Toni Murphy, Laura Myers, Kathy & Clayton Niles, Colleen Nunn, Kathy Oneill, Jan Ormasa & Tom Hiendlmayr, Paula Palotay, Thomas Porter, Steven Prenzlauer & Travis Beardsley, Nancy & William Price, Henne Queisser & Ed Freedman, Jay Quick, Sally Quirk, Faye Rafferty, Tricia Rentschler, Jim Rettig, Joy Rice, Joan & Geary Ridings, Robert Riedl, Kelley Rivers, Marilyn Robinson, Mary Grau & Allan Rosenwald, Lisa Rundle, Judy Russ, Brit Schanks-Paton & Wally Paton, Eric Scheuering, Shirley Sekarajasingham, Deb Smith, Joanne & Mike Spagle, Sherry Spies, Starr & Richard Stevens, Lloyd Thomas, Joan & Patrick Toohey, Nancy & Tom Trimmer, Daphne Turner & John Houle, Tineke Van Zandt & James Vint, Justine Viera, Steven Vincent, Pattie Mullane & Todd Vogel, Karen & Terry Wagner, Deb Walens, Catherine & Theodore Waltz, Shirley & Jeffrey Weir, Nancy Williams, Elaine Gerhardstein & Christopher Wong, and Barb Wuehrmann

Frequent Flyers

Craig Anderson, Keith Ashley, Susan Atkisson, Nancy Bent & Roger Reason, Melanie Builder, Shawn Burke, Carianne Campbell, Becca Carroll, Cheri Chamberlain, Karen Chandler, Andrea Cohen, Janet Cohn, Christopher Cokinos, Lane Coulston, Christine Curtis, Sandy Elers, Kimberly Fitzpatrick, Peggy Ford, Marcy Gray, Laurens Halsey, Judy Heffner, Keith Kamper, John Henry King, Bob King, Titus King, Susan Kozacek, Suzanne Long, Marcia OBara, Erin Olmstead, Lorel Picciurro, Mike Sotak, Kate Stewart, Deb Vath, and Nancy Young Wright

Monthly giving through automatic credit card or bank withdrawals is convenient, secure, and simply one of the best ways you can support Tucson Audubon's programs. For more information, visit tucsonaudubon.org/frequentflyers.

Gifts in Honor or Memory Of

In memory of Bill Bickel from Joanne & Charles Curtis In memory of Brian Ogilsbie from Tim Spahr In honor of Canny Clark from Susan Clark In memory of Carol Golden from May & Bill Wake In memory of Harriet Davidson from Jean & Bruce Anderson In memory of Herb Trossman from Pat Trossman In honor of Jane C. Reichart from Jan Bell In honor of Jennie MacFarland from Kelly Fleming In honor of Marcia & Ty Tingley from Will Lidwell In memory of Marian Kozachik from Elvia Crossland, Carol de Waard & Tom Rehm, Pat & Keith Hamilton, Katy Moore-Kozachik, Wayne Paulsen, and Charles Tinker In honor of Mary Jo Ballator from Margaret Case In memory of Mary Lou Andrews from Greg Andrews, Nena & Paul Andrews, Bradley Andrews, Arlene Atchison, Marilyn & Ross Barta, Valerie & Andy Bernat, and Saundra Landsburg In honor of Nicole Gillett from Kari Anderson In memory of Owen McCaffrey from Pat Johnson To Patrick Callis from Michael Callis In memory of Paul Vietti from Mark & Kyle Vietti In memory of Pearl Parnigoni from Tammy Bose In memory of Richard Grand from Marcia Grand In honor of Robert Glennon from Sam Sherrill In honor of Russell H. Swanson from G. Marie Swanson To Shirley von Bachmayr from Helen Larson & Mark Adams In honor of Sylvia VanGundy from Elizabeth Hoffman In honor of Virginia Rose from Cathryn Rose

Events Calendar

APRIL

Birdathon Begins (through May 7)

11 & 13 Advanced Techniques for Birding by Ear

13 & 20 Beginning Birding workshop

AUGUST

7–11 Southeast Arizona Birding Festival

The Future of Conservation— New Technologies in Bird Surveying

Jennie MacFarland, Bird Conservation Biologist

Monitoring the birds of southeast Arizona is a major purpose of the Arizona Important Bird Areas program and is one of Tucson Audubon's main conservation objectives. Our dedicated and skilled volunteer base and conservation staff use surveys to achieve this. Bird surveying has its own set of challenges and requires a fair amount of trial and error to get an accurate picture of status and population trends. Some surveys focus on key species, like our annual Elegant Trogon survey. Others focus on a specific place, such as a high-priority IBA, where the goal is to quantify all bird species. Exactly how and when to survey can be complicated. Wildlife biologists have long and detailed discussions with land managers on how to achieve this. Tweaks are made over time to produce data that are more meaningful and helpful. Modern technology gives bird monitoring efforts even more options and tools.

One of the biggest innovations in bird surveying has been eBird. Birders and biologists alike can record what birds they detect, and this free-access database has been widely embraced by both birders and the scientific community. eBird's huge data set has been enormously helpful to the Arizona IBA program and Tucson Audubon's many bird conservation programs.



As part of our larger survey efforts to monitor declining Chestnut-collared Longspurs, sound recorders were placed at four different cattle ponds in Las Cienegas IBA this winter. Read more about this soon on the Tucson Audubon blog.

During the summer of 2017, Tucson Audubon was involved in a large Yellow-billed Cuckoo survey effort across several Sky Island mountain ranges. The Coronado National Forest asked us to augment traditional five-minute point counts by deploying some new technology. We borrowed 25 Wildlife Acoustics SM4 Sound Recorders and put at least one recorder on each of the survey routes, using our best guess on where to locate them. The recorders are rugged green boxes, about the size of a five-pound bag of sugar, with two microphones sticking out from the sides, and a sturdy



Jennie and TAS SM4 Sound recorder set up along the San Pedro River to capture diagnostic sounds of migrants and spring nesters in this habitat



Dorian Escalante with a sound recorder during Yellow-billed Cuckoo survey in the Tumacacori Mountains

cover protecting the delicate electronics inside. Setting up and deploying the recorders was easy, as was changing the batteries and SD cards every two weeks.

When we excitedly downloaded the first audio files, we found beautiful, high quality sounds of southeast Arizona, including lovely clips of thunderstorms, singing Whiskered Screech-Owls, a chorus of cow voices echoing off canyon walls, and many other audio moments. These 25 recorders were deployed for two months, each capturing ten hours of audio every day, for a total of over 13,000 hours of sound files. This huge amount of data was then analyzed by a dedicated volunteer using rather complicated software to isolate all instances of Yellow-billed Cuckoos vocalizing for each route. Comparing what the recorders captured with what the surveyors found during their four survey visits was fascinating. The results between the two methods were very close, giving us more confidence in our traditional survey methods.

Despite the software's rather steep learning curve, we were impressed with the technology. In 2018, with help from two generous donors, Tucson Audubon bought four SM4 recorders and a bat survey recorder. We won a grant for a software license, and during last year's survey season we set up recorders in different areas with different goals. We're still experimenting with the best use of this technology to modernize and diversify our data gathering methods.

To hear some of the amazing sounds we captured, please visit the Tucson Audubon blog at tucsonaudubon.org/blog.



The Arizona IBA program is part of a large global conservation effort, but even in our comparatively small portion, the state of Arizona, Tucson Audubon manages to accomplish huge survey efforts with the dedicated help of our amazing volunteers. Together we have done important and impressive field science. Thank you.

TUCSON AUDUBON SOCIETY'S 2018 ANNUAL REPORT

2018 Finances

Tucson Audubon maintains a calendar fiscal year. The organization started 2018 under the leadership of its board of directors, followed by direction provided by Interim Executive Director Patti Caldwell. Patti, a highly regarded leader in Tucson's non-profit community, provided support to the staff while the board organized and conducted a search for a permanent Executive Director.

During Patti's brief tenure, Tucson bid farewell to full-time Finance Director, Mark Krietemeyer, and contracted the part-time accounting services of Kevin Marshall. Kevin led the transition to a new accounting software platform, which went live at the beginning of the third quarter of 2018. A patient, thorough search for a parttime bookkeeper resulted in the hiring of bookkeeper, Sheri Siesennop, in October.

Throughout these transitions, lead staff worked with Kevin Marshall to conduct a substantial amount of "forensic accounting"—looking backwards to confirm and, in some cases, reclassify funds as temporarily restricted. Key findings included:

- · Restricted assets surpass \$2 million; approximately half are restricted for the Paton Center
- · The organization operates from a much smaller pool of unrestricted funds,
- The organization has likely operated \$150,000 to \$250,000 beyond its means for multiple fiscal years, which has impacted board-designated reserves.

In 2019 we're adhering to a strict budget developed with the input of multiple key staff and with oversight from the board of directors. We'll continue to work diligently to streamline and improve Tucson Audubon's accounting and transaction systems, and we'll be doing so with a new, full-time Finance & Operations Director, Kim Lopez, Tucson Audubon will be seeking greater support in the form of unrestricted dollars. Unrestricted gifts allow for greater flexibility on the part of Tucson Audubon to properly develop employees, support our network of volunteers, and direct internal funding where it's needed most.

As always, the work of Tucson Audubon—in 2018 and going forward—is only possible due to the support of our members, donors, and volunteers. On behalf of the entire staff and board, thank you for the opportunity to inspire people to enjoy and protect birds in partnership with you.

With deep appreciation,

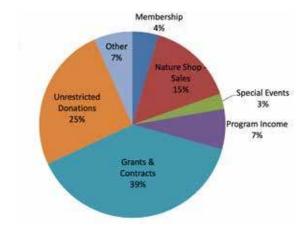
Jonathan E. Lutz, Executive Director

Tucson Audubon Staff: (first row) Olya Phillips, Jonathan Horst, Keith Ashley, Matt Griffiths; (second row) Jennie MacFarland, Diana Rosenblum, Kari Hackney, Luke Safford, Eric Scheuering; (third row) Howard Buchanan, Kim Matsushino, Sheri Siesennop, Dan Lehman, Jonathan Lutz, Rodd Lancaster; (not pictured): Debbie Honan, Tina Hall, Nicole Gillett, and Kim Lopez.

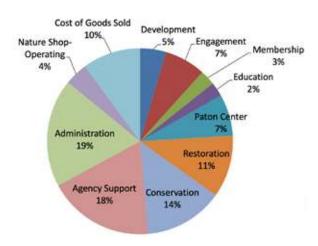
Tucson Audubon Society Income & Expenses Summary

For the Year Ended December 31, 2018

INCOME - \$2,110,301.99



EXPENSES - (\$2,261,108.31)



NET INCOME - (\$150,806.32)

2018 Restricted Income Received - \$1,627,263.21



2018 Annual Report Stats

BIRDING FESTIVAL

Total Registered Participants 904

Nature Expo Attendance 2,480

VOLUNTEERS

Active Volunteers 432

Volunteer Hours Recorded 14,896

PATON CENTER 14,095 individual daily visits in 2018

Visitors came from all 50 U.S. states and 21 foreign countries.

163 species of birds recorded at the Paton Center in 2018

BIRDING FIELD TRIPS

3,190 & 45 participants leaders for 184 outings

51 outings at Sweetwater Wetlands with $3,\!188$ participants

NATURE SHOPS

Tucson Audubon operates Nature Shops at the Historic Y and Agua Caliente Park.

Nature Shop space generously provided by Pima County Natural Resources, Parks & Recreation

 $5,\!648$ customers served

32 volunteers contributed 2,776 hours assisting customers

2018 CONSERVATION ACCOMPLISHMENTS

183

Elegant Trogons identified during study surveys

NEW Important Bird Areas designated: Las Cienegas, Tucson Sky Islands, and Tucson Mountains 200

Lucy's Warbler young fledged via the Nestbox Project

Monitored bats at 2 caves and 8 mines on public lands

54

households joined the Habitat at Home program

native habitat installations at residences and neighborhoods

800 +

native plants planted

500

native tallpot mesquites planted in the Lower Santa Cruz floodplain

550

native plants planted along Sonoita Creek

30

conservation issues addressed, from local land use to federal policy

200+

citizen activist postcards mailed to decision-makers

meetings with elected officials to discuss birds and their habitats

BIRDATHON

19 teams helped raise $\$26,\!291$

PATON CENTER for HUMMINGBIRDS

More Paton Magic— Capital Campaign Complete!



More than 425 individual donations from 37 U.S. states, Canada, and England helped Tucson Audubon wrap up a capital campaign to replace the crumbling Paton home. We estimated three years as the necessary time frame, but were able to complete our charge in just over two. A matching grant from the generous Richard Grand Foundation inspired more than 25% of the donations to arrive in the final two months of fundraising.



The ultimate goal is to preserve the intimate experience of birding in a quiet backyard setting—just as it's been at the Paton property for over four decades. The exterior of the new building will maintain the qualities of a private residence, but the interior will serve multiple needs, including an indoor space to engage the public, a small commercial kitchen for the preparation of bird food and hygienic maintenance of feeders, an administrative space for staff and volunteers, and quarters for short-term overnight stays by visiting researchers, speakers, or artists.

Now that the capital campaign is concluded, Tucson Audubon will begin the process of replacing the former Paton home.

A special line of funding over and above the Capital Campaign earnings will ensure that the house is built with state-of-the-art sustainable and environmentally-responsible materials.

Thank you to everyone who contributed to this effort.

Together we are preserving the Paton legacy far into the future!

Welcome Our New Sonoita Creek Watershed Specialist



Howard Buchanan has transitioned from six months of work at the Paton Center to become Tucson Audubon's new Sonoita Creek Watershed Specialist. He comes preintegrated to the broad community of people working on all fronts for the protection of Sonoita Creek and the surrounding watershed; he volunteers for almost every conservation group there! Fortunate to have spent much of the past decade outdoors in rural southeast Arizona, Howard has

been found smashing crawdads, digging Johnsongrass, torturing tamarisk, banding hummingbirds, monitoring sediment flows and water quality, recording soundscapes, and working to facilitate watershed science and share it with the public. The work Howard is undertaking will provide a critical piece to maintaining the long-term birdiness, and overall biodiversity, of the Paton Center, Patagonia-Sonoita Creek Preserve, and other local birding hotspots!

Becoming Unrooted at the Paton Center

Tina Hall, Paton Center Coordinator

This fall of 2018 was a wonderful time spent raking leaves, smelling wood stove smoke, and feeling very seasonal, all the while seeing hummingbirds, sparrows, and other great birds—the best of worlds. While many locals have said that this fall and winter have been colder and more seasonable, the rain and 6-inch snow in January will be a great catalyst for spring flowers.

People-wise, the fall and winter have been busy, especially starting in January with many visitors/snow birders. Three-day weekends have been especially busy, often with more than 70 visitors in a day.

Our red Fox Sparrow, Green-tailed Towhee, and White-throated Sparrow have all had fans waiting patiently for them to appear. Our daily volunteers at the Paton Center have spread extra seed around our brush piles to keep our sparrows happy.

One of the unique things about the Paton Center is that it attracts very interesting people to visit: birders, adventurers, and the just plain curious. What was surprising is how many people decided to sell their home, store or sell everything that would not fit in a camper, and become "unrooted," going anywhere and everywhere they chose. Yes, they may become "rooted" again in the future, but for now are happy to be like migrating birds, spending some time here or there, but never in one spot for too long.

One such migrant had a unique story. He came to the Paton Center not being a birder, and while sitting there looking at hummingbirds decided to take up the hobby and become a birder and a lister. The first bird on his life list? The Violet-crowned Hummingbird.



Birders flock to the Paton Center year-round

Paton Bird Profile: **Yellow-breasted Chat**

Keith Kamper, Paton Center Volunteer and Board Member



Yellow-breasted Chat Frank Retes

It's mid-April and from the brushy tangles that abound around the Paton Center, a bewildering assortment of clucks, whistles, gurgles, and calls pierces the air. Wait, is that a cat mewing in the brush? Now a woodpecker drumming! Slowly emerging, a flash of yellow on the throat and belly, grayolive back, long tail and thick bill now in view. And those stunning white "spectacles" encircling the eye. Suddenly springing from its impenetrable refuge, the Yellow-breasted Chat vigorously, almost comically, pumps its tail and wings, legs dangling, singing while in its odd flight to show off for potential female mates. Just as quickly as it appeared, it skulks back into the undergrowth, its voice the only evidence that it persists. Welcome to the Paton Center and the rich and diverse riparian woodland of Sonoita Creek.

Each year chats return to Arizona in mid-April from their wintering grounds in Central America and Mexico. Once considered a bizarre wood warbler, in 2017 it was placed in its own monotypic family, Icteriidae, based on DNA studies that demonstrate a lineage unique to this species.

An accomplished mimic, the male Yellow-breasted Chat not only imitates other bird species, but can also produce human sounds, melodies, and other noises (like car alarms!). While sound is the primary mode of communication, the chat's throat and breast plumage reflect under ultraviolet light, exhibiting two peaks on the ultraviolet spectrum and 570-590 nm (nanometers) of yellow light on the spectrum. This is said to represent a visual communication for this species. While we may not be able to see this, if we are lucky we might spy this enigmatic species at the Paton Center, and if you are really lucky, it just may visit the jelly feeder during your visit!

Tucson Audubon's Mason Center



Mason Center garden providing multiple vegetative layers for birds to roost, forage, nest, and seek protection; Below; hummingbird garden at the Mason Center

Located in the booming developments of northwest Tucson, the Mason Center offers 20 protected acres of Saguaro-Ironwood desert, a rarity in Tucson's now mostly metropolitan area. The land was donated to Tucson Audubon by its previous owner, Mrs. Orpha Mason, and now serves as an educational center, as it provides the essential habitat for pollinators, birds, and other wildlife. The mission of the Mason Center is to protect the saguaro and ironwood tree habitat for future generations; foster awareness, understanding and stewardship of our desert environment; and provide educational programs and research opportunities. Tucson Audubon is creating gardens specific to meeting the needs of southeast Arizona's native birds and pollinators through planting native species that provide the necessary resources for nesting, foraging, and roosting. Recently, with the help of grant money and dedicated volunteers, the gardens have evolved into beautiful demonstration gardens open to the public.

The garden on the south side of the education building houses fragrant dalea, brittlebush, pink lady's slippers, and fragrant bee bush. The dalea, a major butterfly larval and nectar host, is also frequented by native bees. During the spring blooming season, hummingbirds will swoon over the pink lady's slippers, finches will attack the seeds from the fragrant bee bush, and a variety of bee species will visit the brittlebush's sweet yellow flowers.

Our butterfly garden is located just north of the main house. As a certified Monarch Waystation, it provides the necessary resources for monarch butterflies to produce successive generations and sustain their migration. Here, you will find multiple milkweed species, little-leaf cordia, chuparosa, flame bush, desert hackberry, and common sotol. A shallow water dish (with small rocks added to prevent wildlife from drowning) provides necessary hydration in the hot summer months.

When creating a bird- and wildlife-friendly space, it is imperative to provide them with adequate protection from predators and the elements. Planting native species that offer different vegetative heights creates excellent protection as well as foraging and roosting opportunities for many species of birds. For instance, ground cover and medium low hanging shrubs are needed by Gambel's Quail, who forage and seek refuge in its security. Smaller raptors, Phainopepla, and Western Screech-Owls utilize the canopy layer of vegetation to seek out prey, forage, and/or sing to their hearts' content. This patch of desert at the Mason Center provides a great visualization of the three vegetation layers. The saguaro and ironwood trees create the canopy layer; the creosote and hackberry make the mid-story; and the ground cover consists of brittlebush and triangleleaf bursage.

An important component of the Habitat at Home program is water conservation. Conserving water in your garden can be accomplished in many ways. For instance, the Mason Garden Crew has created rainwater harvesting basins. The basins are sunken areas that not only hold water that falls into them, but also trap rainwater from the surrounding area. This provides the plants in and near the basin with more moisture than they would normally acquire.

As we continue work at the Mason Center, we will develop gardens that represent each level of our Habitat at Home program. A container garden that is perfect for apartment dwellers and those with limited space will be on display as well gardens for those lucky enough to have large areas with endless potential. The demonstration gardens will show the inclusivity that the Habitat at Home Program is striving for: any space, any budget, any level of

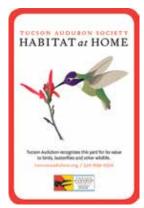
experience. Anyone with an outdoor space has the great opportunity to help birds and pollinators that have lost their essential habitats. To do so, we only need to designate a small portion of our outdoor space to help; but the key factor in its success is that we ALL must do our part. Yes, individual gardens help, but with neighborhoods and communities taking part, we can recreate the corridors between open spaces that have been destroyed.

We welcome you to come visit these gardens and get some ideas for your own yard. The Mason Center is open most weekdays 9 am-5 pm. It is closed when the chain is across the driveway. Please call 520-209-1802 for details.

For more information about Habitat at Home, please visit tucsonaudubon.org/habitat or email habitat@tucsonaudubon.org.









Left to right: butterfly garden, saguaro-ironwood desert, Habitat at Home yard sign, chuparosa

Habitat at Home Plant Profile: Slimpod Senna

Lynn Hassler, Nature Shop Garden Volunteer Captain

Scientific name: Senna hirsuta var. glaberrima (formerly Cassia leptocarpa)

Family: Fabaceae (Bean/Pea)

Native range: New Mexico and southern Arizona to South America

Wildlife value: Seeds attract birds and small mammals; flowers and leaves entice ants and other insects; larval food plant for the Cloudless Sulphur butterfly (Phoebis sennae)

In Arizona, slimpod senna can be found along sandy desert washes, streams, and along roadsides from 2500-5500'.

This handsome perennial shrub grows 3-6 feet tall and looks best from July-September when tender new growth and rich butter-colored flowers appear. This is also the time of year when waves of large yellow and white butterflies sail into our area, many journeying 200 miles or more from Mexico. These are Cloudless Sulphurs. Males are bright yellow and the egg-laying females are a greenish white. When the caterpillars emerge from the eggs, they become virtual eating machines, voraciously feasting on the senna foliage. The caterpillars are host specific and simply not interested in other kinds of plants.

Ants are attracted to the glands at the base of the leaves. These are called extrafloral nectaries (EFNs), and they exude a sugar-rich food source for the ants. In return the ants protect developing leaves, shoots, and flowers from other consumers.

Long and slender arch-shaped pods follow the handsome flowers and split open to accommodate seed-eating critters. Plants reseed readily, particularly in irrigated areas. Slimpod senna is dormant in winter and can look somewhat

ratty, so place it alongside other plants that remain evergreen throughout the year. In fall/winter cut back plants to 6-12 inches high to ensure vigorous new growth the following season.



The Fuzziness of Vagrancy Chris Benesh

In a recent article I discussed some of the challenges in bird identification brought about by variation among individuals in a population and how that can result in one's having great difficulty in identifying individuals to subspecies and species. There is simply a certain level of uncertainty built into the identification of certain challenging groups. Having served on the Arizona Bird Committee off and on for many years, I find the greatest challenge is not in confirming an identification of a submission, but rather being tasked with trying to assess whether or not it got to Arizona naturally.

Virtually all checklist committees operate in a black and white manner. Bird X was identified correctly, or it was not. The evidence suggests that Bird X was of natural occurrence, or it was not. Most rarities have established patterns of occurrence when one examines a set of records to the point where their occurrence can be predicted. They are rare, but expected. At other times it is quite a bit fuzzier. It is the fuzziness that frustrates and is the bane of committee members and the birders who sometimes disapprove of their conclusions.



Ringed Kingfisher in Safford, Lyndie Mason Warner

While we know a tremendous amount about bird movements, patterns of dispersal, and migration, we are learning more and more every day. Tiny data recorders attached to birds are providing amazing new insights into their dispersal and, in almost every case, bird movements are more complex than we had previously imagined. What we often lack is any real level of certainty in our opinion about whether a bird got there on its own. We can't ask the birds how they got there because we don't speak bird, and this fact forces us to guess.

We can't know how a Ringed Kingfisher showed up in Safford because it can't tell us, but it seems somewhat plausible that it occurred naturally because that species shows patterns of dispersal from its closest core range in south Texas to neighboring New Mexico and Louisiana. It is a young female, and young birds are the



Brown-backed Solitaire, Amado Demesa

most apt to disperse and end up far from where they were born. And lastly, Ringed Kingfisher is unknown in the illegal pet trade.

What about Brown-backed Solitaire in the Santa Ritas and Huachucas? Were they wild birds? Maybe. They both showed up in the right sort of habitat at the right time of year, and this species is known to wander seasonally. But it is also a very popular cage bird in Mexico. Could they have been released somewhere close to the border?

Lastly, there is that Gray Go-away-bird that spent some time at the Water Ranch in Gilbert. Well, that one clearly seems to be an escapee, as it is an exotic from Africa!

There is a spectrum of uncertainty in these three examples. In the case of the Ringed Kingfisher, we can be reasonably confident that the bird occurred naturally. In the case of the Gray Go-away-bird, we can be certain that it did not occur naturally. But what to do with the Solitaire example? One can make a reasonable case for either scenario. Birders chasing a Solitaire will definitely be hoping that the prevailing opinion is of its being a wild bird, but once you've seen a few in cages in Mexico, the opposing viewpoint becomes more compelling. The truth is, we just don't know, and short of any direct evidence of captivity, it is all just speculation.

What I would like to see more of, going forward, is a move away from black or white determinations of provenance, allowing for more tentative acceptance of those many species falling into the gray. Bird listers would be happier and rare bird committee members could move away from having to make the unknowable and often unpopular choice.

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.



Tucson Audubon thanks our Birds Benefit Business Alliance members, who have shown their support for bird conservation through annual contributions and in-kind donations. Please show your appreciation by supporting them. For more information, including links to member websites, visit tucsonaudubon.org/alliance.

LEADING

Carl Zeiss Sports Optics Tamron USA Tucson Electric Power

SUSTAINING

Alexander | Carrillo Consulting Crown Community Development-Arizona Diet of Hope Institute Dr. Miguel A. Arenas, MD **Farmers Investment Company** Green Valley Pecan Company Hatfield CPA LLC Historic Y Kimberlyn Drew, Realtor Leica Sport Optics Originate Natural Building Materials Showroom Swarovski Optik

SUPPORTING

Rockjumper Birding Tours Solipaso Tours/El Pedregal Nature Lodge

CONTRIBUTING

Action Imaging Group Adventure Birding Company AZ Birder Casitas Beaumont & Port Arthur Convention and Visitors Bureau Bed and Bagels of Tucson The Bird House Desert Harrier **Hunts Photo and Video** Quailway Cottage Sabrewing Nature Tours Santa Rita Lodge **Tucson Water Department** Visit Tucson WINGS Birding Tours Worldwide

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NAMIBIA, OKAVANGO & **VICTORIA FALLS OVERLAND III**

Dates: September 23-October 10, 2019

Price: \$6,748

Leader: André Bernon

This popular birding and wildlife safari visits some of the major highlights of three of Africa's most remarkable countries. Birdlife abounds, and we target an impressive array of localized as well as more widespread African species. What's more, spending quality time observing mammals will be a major focus of this trip.

AUSTRALIA - EAST COAST II

Dates: September 26-October 16, 2019

Price: \$9.384

Leader: Steve Davidson

During this exciting tour, we will cover an incredible range of habitats as we travel across the eastern portion of the country. As a consequence, our combined birding and wildlife safari will see us encounter a fantastic collection of endemic birds and incredible mammals, most of which occur nowhere else!



Victoria's Riflebird, Francesco Veronesi

Solipaso Tours

solipaso.com

YUCATAN BIRDS AND RUINS

Dates: January 10-20, 2020

Price: \$4,050

Leader: David MacKay

Bird highlights include Yucatan Flycatcher, Cozumel and Yucatan Vireos, Woodpecker, Bobwhite, Jay, White-bellied Wren, Orange Oriole, Ruddy Crake, Rose-throated Tanager, Mexican Sheartail and Graythroated Chat. We'll also visit some of the magnificent archeological ruins (Tulum, Calakmul and Uxmal), enjoy unique regional cuisine, and explore the world of the Mayan culture.



Golden-cheeked Woodpecker, Alan Harper

MONARCH BUTTERFLIES AND BIRDS

Dates: February 9-16, 2020

Price: \$3,050

Leader: David MacKay

Over 20 million monarch butterflies make their amazing migration of more than 2,000 miles from Canada to a small area in the mountains of Michoacan and the Estado de Mexico. It's a marvel of nature that is not to be missed! In addition, we'll visit the Lerma marshes, where we seek the beautiful Black-polled Yellowthroat, then make our way to Valle del Bravo and Lake Patzcuaro.

Conservation in Action Nicole Gillett, Conservation Advocate

Advocacy Vocab: Terms and Annoying Acronyms in This Section

Clean Water Act: Passed in 1972, this Act covers surface water quality protections.

404 permit: Under section 404 of the Clean Water Act, this permit is given for dredge or fill of sediment in river channels.

Waters of the United States (WOTUS):

This definition covers what water bodies are protected under the Clean Water Act. The definition is currently under legal debate.

SPRNCA: The San Pedro Riparian National Conservation Area, a federal conservation status under the Bureau of Land Management.

Bureau of Land Management or BLM:

Agency under the Department of the Interior that administers large sections of public land.

Army Corps of Engineers: Agency under the Department of Defense, involved with a range of public works, that administers the Section 404 permits for the Environmental Protection Agency

Environmental Protection Agency or

EPA: Independent federal agency that implements programs such as the Clean Water Act and Clean Air Act.

TCEs: A chemical compound frequently used as an industrial solvent; there is a TCE site in Tucson, which is overdue for EPA cleanup.

PFAS: Perfluorinated chemicals, an emerging water contaminate of concern present all across the county.

BREAKING: Megadevelopment Villages at Vigneto permit suspended

For those who have been following the saga of the proposed mega-development Villages at Vigneto in Benson, AZ, there is good news: the necessary Clean Water Act Section 404 permit needed by the developer has been suspended.

Tucson Audubon has been following and activity engaging in this issue for many years and considers this a huge victory for all those who love the San Pedro River and all the life it supports.

This, unfortunately, is not the end, as the Army Corps is expecting to issue a review in the coming months. Tucson Audubon is committed to continue fighting for the life of the San Pedro River.





San Pedro River, Nicole Gillett: Yellow-billed Cuckoo, Steve Baranoff

Birds in the News

The U.S. Senate passed a bipartisan bill to expand public lands, designate more than one million acres of wilderness, and permanently fund the Land and Water Conservation Fund.

This positive step forward by the Senate recognizes the value that the public (that's us folks!) places on protected open space.



This is a particularly big win for advocates, who have been urging Congress to permanently fund the Land and Water Conservation Fund, rather than only reauthorizing it every few years. This last year the fund was not reauthorized and demonstrated the risk of this style of inconsistent funding.

Read more at: nyti.ms/2ToZ9O6.

Mississippi Kite, Ned Harris

Birds and National Parks

The expansion of public lands is a huge win for birds. A recent study completed by National Audubon Society indicates that "over the next century—the century of climate change—our National Parks will be increasingly critical sanctuaries for birds seeking suitable climate in new places."

The changing climate is impacting bird migration, nesting, and habitat availability now, and with over half of all bird species threated by climate change, understanding how we can help birds adapt is critical. The new Audubon report found we will likely see 23% species turnover (change in species) in National Parks by 2050 and that these parks act as habitat refuges for birds moving because of a changing climate.

Read more: audubon.org/climate/national-parks.





Northern Bobwhite, Andy Morffew; Saguaro Nationa Park, Ade Russell

Being an Advocate 101

This new series in each issue will focus on ways to be an advocate for birds.

Being an advocate is easy and will mean something different to everyone.

Simply put, being an advocate is using your voice and actions to promote change.

For birds, our voices and actions are especially important because birds cannot participate in our decision making.

Here are some first steps you can do to become a voice for birds:

- 1. Find friends. It is always better to work as a team. Tucson Audubon is a great place to start. Sign up for emails and follow our action alerts at tucsonaudubon.org/advocacy.
- 2. Find your decision makers. Use commoncause. org/find-your-representative to find contact information for all of your decision makers, from state legislators to the U.S. President.
- 3. Start in your own backyard. Actions can speak louder than words. Tucson Audubon's Habitat at Home program can help you help birds in your own backyard.



Pyrrhuloxia, Francis Morgan

Being a Voice for Birds: Advocacy Events Recap

ENVIRONMENTAL DAY AT THE CAPITOL

Environmental Day at the Capitol 2019 was a huge success. With over 300 environmental advocates in attendance, we smashed past records and, as such, had that many more opportunities to discuss environmental issues with legislators.

This year's Environmental Day theme was re-defining Arizona's 5 C's for modern times. Arizona used to be known by 5 outdated C's: copper, cattle, cotton, citrus, and climate. We proposed 5 new C's for a sustainable future:

- 1. Climate preparedness: develop and implement plans to reduce emissions and protect those most affected by climate change
- 2. Clean air and water for all Arizonans: eliminate bad air days and ensure safe drinking water for everyone
- 3. Conservation of lands, waters and wildlife: protect public lands, rivers and streams, plants, and animals
- 4. Commitment to efficient and renewable energy: make clean energy accessible to all; address energy poverty issues
- 5. Cultural inclusiveness and diversity: create a healthy environment that includes environmental justice, equitable access to nature and resources, and respect for all people.

In case that does not roll off the tongue: Arizona's proposed Sustainable C's are cultural diversity, climate action, clean energy, clean air and water, and conservation.

Join us next year!



LD 9 group at Environmental Day, Nicole Gillett



WATER MATTERS MORE

Tucson Audubon and Patagonia Area Resource Alliance teamed up to bring the film "Water Matters More" to the Loft Cinema as a free public showing. We had an excellent turn out with over 275 people joining us to learn about Patagonia, AZ and water issues. We were also joined by a suburb panel of experts to help answer questions from the audience. Special thanks to Carolyn Shafer, Kathy Jacobs, Peter Reinthal, Susan Montgomery, Thomas Meixner, and the Loft staff!

Supported by a local jaguar at "Water Matters More," Nicole Gillett

Meet your Conservation Advocate



I have met many of you, but wanted to introduce myself to those of you who may see my name only occasionally. My name is Nicole Gillett and I am Tucson Audubon's Conservation Advocate. I grew up outside Seattle, WA, appreciating our green landscapes every opportunity I got. I received a BA in Environmental Science from Colorado College. While in Colorado, I interned for the Getches-Wilkinson Center and worked on a tribal water law project. I then moved east to get an MS in Geography from the University of Massachusetts, Amherst. My MS thesis was on small town river resilience and finding local solutions to a climate driven problem. My passion lies in the intersection of people and the environment, and building individual capacity that leads to community resilience. I look forward to meeting each of you and protecting Arizona's birds and their habitats.

Look to this section in the future for more advocate profiles! Do you know a great local environmental advocate? Nominate them for a feature!

All Connected: Why Strong Water Policy is Important for all Life in Arizona

Right now Arizona is locked in a political battle over what clean water looks like in the state. From bills to weaken the Groundwater Management Act to efforts to remove rivers from protection under the Clean Water Act, Arizona is at risk of losing major water protections for over 90% of our rivers and streams. What does that mean for Arizonans?

Clean Water means:

- Walkable and livable rivers. Those who have lived in Tucson for some years remember when the Santa Cruz was a pile of sludge and not safe to touch not too many years ago. Now, thanks to the Clean Water Act and required upgrades to the wastewater treatment plants, the Santa Cruz is clean and healthy.
- Public health and safety. What enters our waters at the surface makes its way to our drinking water. Concerns over existing contaminants in Tucson's water, including TCEs, have recently expanded to include emerging contaminants, including PFAS.
- Thriving habitat. While over 90% of Arizona's rivers may not flow year round, over 80% of our wildlife species rely on wet and dry rivers at some point in their lives from breeding to feeding.
- Consumer protections. Even dry rivers in Arizona hold water at some point during the year. Clean Water safeguards also help protect residents from flood hazards from poor river management.

What can you do now?

Speak up for Arizona's river and your clean water. Call your decision makers and stress how important clean water is to Arizona.

You can also comment to the Environmental Protection Agency until April 15 on the new Clean Water Act Rule: epa.gov/wotus-rule.



Santa Cruz with clean effluent stretches

Meet Your Decision Makers

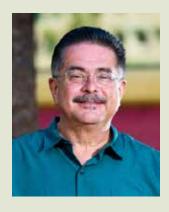
MAYOR JONATHAN ROTHSCHILD

Mayor Rothschild has been a great partner in his many years of service. Our latest partnership was officially declaring 2018 the Year of the Bird here in Tucson as part of the nationwide 100 year-anniversary of the Migratory Bird Treaty Act.



PIMA COUNTY BOARD OF SUPERVISOR'S CHAIR, SUPERVISOR RICHARD ELÍAS

Supervisor Elías has been a partner and environmental champion for many years. Recent efforts to improve Pima County's sustainability goals are just one of his great efforts.



This is a new feature to help all of us recognize our ally decision makers. Would you like to see a decision maker featured here? Nominate them!

The Bluebird of Happiness Debbie Honan

The bluebird is a near universal symbol of happiness. In Russia it represents hope and in China's Shang Dynasty it is considered a messenger of knowledge and enlightenment. According to folklore, many Native American tribes believed bluebirds represented the renewal of spring. They hung dry gourds to entice bluebirds to nest near their settlements so they could enjoy their enchanting songs of happiness and hope.

But, of course, it's not just bluebirds that make us happy; it's the feeling that comes from embracing nature and being part of a diverse and growing community of people who share a passion for birds and the places they live.

Tucson Audubon Society Nature Shops provide a hub for the birding community to gather, ask questions, get answers, share stories, find information, and support Tucson Audubon Society with every purchase.

Just getting started? We have field guides, entry level binoculars, and plenty of advice to get you going.

Want to foster a love of science and nature in your kids or grandkids? Of course you do! We make it easy with a variety of fun and educational books, toys, and activities.

Looking forward to your upcoming birding adventure in Colombia, but not the long plane ride? Reading a book in the Birder Murder Mystery Series by Steven Burrows will make the time fly by.

Couldn't quite make out all the details of the White-throated Thrush in Madera Canyon? It just might be time to upgrade to a premium pair of optics and we'll help you find just the right pair at a terrific price (Member discounts and no tax!).

Need a new hat to protect your noggin from the Arizona sun? We've got you covered.

The Tucson Audubon Society Nature Shops have a lot in common with bluebirds-we bring joy and happiness to everyone who stops in to see us.

Tucson Audubon Nature Shops

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

SHOP HOURS

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

November-April

Thur 9 am-2:30 pm, Fri 10 am-2:30 pm, Sat 10 am-1:30 pm

May: Thur 9 am-1:30 pm, Fri-Sat 10 am-1:30 pm June-August: Thur 9 am-1:30 pm 520-760-7881

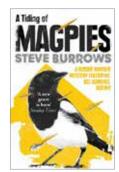
12325 E Roger Road, Tucson 85749

*Please call to confirm hours. The shop opens earlier and closes later during certain months. 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.



Audubon Bird by Wild Republic



Birder Murder Mystery



Celestron 9-27x56 Hummingbird Scope Non-member \$399.95, Member \$359.95



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Songbird Station Bird Feeder \$15.00



Zeiss Victory SF 8x42 Non-member \$2,999.99, Member \$2,699.99

BOOK REVIEW

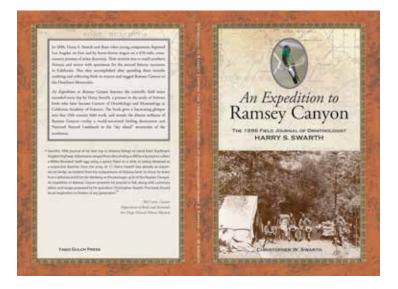
An Expedition to Ramsey Canyon, The 1896 Field Journal of Ornithologist Harry S. Swarth A review by Ken Blankenship

"The several mountain ranges of southern Arizona rise much like islands from a surrounding sea of plains. Their bird and mammal faunas are peculiar and are sharply differentiated from those of the surrounding lowlands." —Harry S. Swarth

An Expedition to Ramsey Canyon presents the fascinating account of a 650-mile journey by foot and horse-drawn wagon, undertaken by an intrepid group of aspiring young field ornithologists in 1896. At the time, little to nothing was known of the incredibly diverse and unique avifauna of southern Arizona, and the field journal kept meticulously throughout the expedition by Harry S. Swarth transports the reader into the cool, lush, and rugged Ramsey Canyon as if s/he is right there with the young explorers, recording species and observations never before known in the United States. It is especially impressive to consider that these very detailed field notes that document collecting and preparation methods, behavioral observations, identification, etc. were written in such excellent language by a 17 year-old!

The book is broken into three parts: 1) The full, original (unedited) field journal of Harry S. Swarth; 2) A collection of tables presenting bird names "then and now," species recorded, specimens collected, etc.; and 3) An excellent summary of a number of particularly noteworthy species encountered during the expedition. Some highlights/features of the book include:

- Color maps of the Southwest in the late 1800s, tracing the expedition's journey
- · Color paintings and modern images of select species and habitats
- Side bars with block quotes from later publications by Harry S.
 Swarth, as he applied knowledge gained during the expedition to scientific articles
- Detailed tables of all species observed and specimens collected, including common names and how/if they have changed
- · Detailed accounts of a number of particularly significant findings



Perhaps the most intriguing example found in the latter section is an extensive assessment of two Bumblebee Hummingbirds that were apparently collected in adjacent Brown Canyon. Both females, these specimens represent the only documented occurrence of the species in the United States to this day!

This book provides birders and nature lovers alike with a unique window into the very first comprehensive attempt to survey the avian wonders of southern Arizona, and makes an excellent addition to an Arizona bird lover's library.

Ken Blankenship is a bird tour guide currently pursuing a dream of living full-time among the "Sky Islands." He is a Tucson Audubon volunteer and self-admitted "ear-birding addict," having obsessively studied bird vocalizations for years.

Join Tucson Audubon Today!



Your membership supports Tucson Audubon's efforts in:

Conservation We enable people to conserve our natural

environment through on-the-ground activities.

Advocacy We promote public policy and speak

out for wild birds and their homes.

Restoration We create sustainable wild bird habitat. **Engagement** We help people connect with wild birds.

Benefits include:

- $\cdot \ \mathsf{Free} \ \mathsf{guided} \ \mathsf{birding} \ \mathsf{field} \ \mathsf{trips}$
- · Vermilion Flycatcher news magazine
- \cdot 10% discount in our Nature Shops \cdot Discounts on Tucson Audubon classes & events

All funds are used for local conservation efforts.

Sign up at tucsonaudubon.org/join or call 520-209-1802.



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