

Vermilion

FLYCATCHER

April-June 2018 | Volume 63, Number 2





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 offers a library, nature centers, and nature shops to its members and the public, any proceeds of which benefit its programs.

Tucson Audubon Society

300 E. University Blvd. #120, Tucson, AZ 85705
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tucsonaudubon.org

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TUCSON AUDUBON NATURE SHOPS

300 E University Blvd #120 ext 7015
Hours: 10 am–4 pm, Mon–Sat
Agua Caliente Park, 12325 E Roger Rd 520-760-7881
Hours: October: Thursday, Friday and Saturday: 9–1:30
November–May: Thursday: 9–1:30; Friday and Saturday: 10–1:30
Please call to confirm hours. Nature Shop space generously provided by Pima County Natural Resources, Parks & Recreation.

TUCSON AUDUBON 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 dawn to dusk

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FRONT COVER:
Greater Roadrunner by Doris Evans. Doris has taught in the Tucson Unified School District, Big Bend National Park, and the Arizona-Sonora Desert Museum. She is now retired, has published a few natural history books, and enjoys nature photography and volunteering for Tucson Audubon and Pima County Natural Resources, Parks and Recreation.

To have your photograph considered for use in the *Vermilion Flycatcher*, please contact Matt Griffiths at mgriffiths@tucsonaudubon.org.

Birding Southeast Arizona App

Android version is here!

A great interactive companion to our *Finding Birds in Southeast Arizona*, the Birding Southeast Arizona app is now available for Android phones (\$7.99) as well as Apple iOS devices (\$9.99). It covers over 130 birding sites in six subregions in and around Tucson and gets you there with detailed directions.



The app takes bird-finding in southeast Arizona to the next level:

- Use GPS to find birding “sites near me.”
- View details and a list of common species for each site.
- Get turn-by-turn directions and find nearby amenities.
- Search all sites for a “target bird,” and find the nearest location.
- Access Audubon’s online bird guide for quick reference in the field.

A collaboration between Tucson Audubon and the Southeastern Arizona Bird Observatory, with funding from the Southeastern Arizona Birding Trail committee. Proceeds benefit the education, research, and conservation programs of these organizations.

Go to tucsonaudubon.org/app to learn more.



Falling in Love Patti Caldwell, Interim Executive Director

I had the opportunity to join the staff of Tucson Audubon in early January, to provide support and leadership while the Board of Directors does the important work of selecting the next Tucson Audubon Executive Director. This process is well underway, with many well qualified candidates, and the Board's goal is to make a hiring decision by early May.

Although I am a short timer on the staff at Tucson Audubon, my perspective may mirror that of many members of our communities.

And my perspective is one of astonishment and enthusiasm. I had no idea of the depth and breadth of incredible work by this mighty jewel of a nonprofit in southeast Arizona! I would guess that for many people, their

view of Tucson Audubon is a bit like the story about the person who is blind touching an elephant. We rarely see the complete animal.

We may see a wonderful Nature Shop with both practical and fun resources. We may see more than a dozen field trips each month to identify and enjoy new birds and old friends. We may see advocacy for our environment and wildlife through our work on the San Pedro, Santa Cruz, and Rillito Rivers. We may see research through bird counts and special nest boxes. We may see learning through Living With Nature programs, in-depth adult education, and elementary school instruction. We may see conservation through the Habitat at Home program as well as personal landscape enhancement through native plantings, earth works, and water

harvesting. We may see special preserved spaces for birding and exploration, like the Mason Center and the Paton Center for Hummingbirds.

I am frankly in awe of the smart, dedicated staff who work each day at Tucson Audubon, and the Board of Directors who volunteer their time to provide oversight and serve as community ambassadors. Though my official role with Tucson Audubon may be short, I am now a forever member and supporter.

I hope that this year you will take the time to learn something new about the incredibly important and innovative work by Tucson Audubon. And show your appreciation through the donation of your time and your treasure.

Will You 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:

- Free guided birding field trips
- *Vermillion Flycatcher* news magazine
- 10% discount in our Nature Shops
- Discounts on Tucson Audubon classes and events

All funds are used for local conservation efforts.

You may sign up at tucsonaudubon.org/join or call our Membership Coordinator 520-209-1802.



American Kestrel, David Kreidler

Southeast Arizona Bird Calendar

What our birds are up to April through June

Matt Griffiths

April through June is a great time to be in southeast Arizona! Dramatic changes are taking place and are easy to see and experience. Wintering birds such as White-crowned Sparrows and Sandhill Cranes have started their journeys northward, and will be completely gone by the end of this time period.

With the warming weather, important wildlife plants such as mesquite, palo verde, wolfberry, and hackberry leaf out and flower, attracting the insects that provide many birds with a stable food source. Of course, this occurs when most of our breeding species return! Lucy's Warblers and Bell's Vireos came back in March, but April sees an influx of migrants also taking advantage of the food bonanza. Now is the time to find Calliope Hummingbirds, Hermit and Townsend's Warblers, among others, as they pass through our region.

Sonoran desert birds will be nesting already, while other species at higher elevations, like Red-faced Warbler will start setting up their territories. By the time June rolls around, cicadas are singing and the heat will leave you looking forward to the return of rain, Yellow-billed Cuckoos, and more birding fun during our monsoon!

HIGHLIGHTS FOR THE SEASON



Barking in the Sky Islands?

Perhaps the most enigmatic bird in southeast Arizona, the Elegant Trogon arrives back in mountain canyons in April and May to seemingly fill the air with the sound of sea lions. Listen for yourself in Madera Canyon, the Patagonias, or the Chiricahua Mountains.



Owls and nightjars return

There's not much that's more fun than going out for a night adventure and hearing these birds call! This is the best time as owls are very vocal in setting up their territories. Down in the lowlands, Common Poorwill and Western Screech and Elf Owls can be found right around Tucson in saguaro habitat. Higher up in the surrounding Sky Islands, you can hear Whiskered Screech, Elf, and Flammulated Owls as well as Mexican Whip-Poor-Will.



Hummingbirds back in numbers

April sees an influx of returning breeding hummingbirds and feeder stations begin to fill with the little territorial fighter jets! Black-chinned Hummingbirds can be found in Tucson, while Broad-tailed, Rivoli's, and Blue-throated are back in the Sky Islands. Calliope and Rufous are still migrating through at the start of the time period.



Shorebird migration

A number of shorebirds can be found starting in April as they head north. Make a trip out to Lake Cochise and Twin Lakes Golf Course in Willcox to see birds you might not expect to find in the middle of the Chihuahuan desert. Species include Semipalmated Plover, Marbled Godwit, Baird's and Western Sandpipers, Wilson's and Red-necked Phalaropes, Willet, and Lesser Yellowlegs.

Elegant Trogon, ©bryanjsmith; Elf Owl, Jeremy Hayes; Blue-throated Hummingbird, David Kreidler; Wilson's Phalarope, Lois Manowitz

Birdathon is like a walkathon, but instead of counting laps you count birds!

TUCSON AUDUBON BIRDATHON 2018 BIRDING *for the* BIRDS

Create your own
Birdathon team
or join an
expert-led team.

Gather pledges for
each species seen, or
collect flat donations
online by promoting
the team page or by
mailing checks to the
Nature Shop.

When you donate
through Birdathon
you support Tucson
Audubon's mission
and conservation
programs.



Participate in Birdathon anytime from April 7 to May 7, 2018

Birdathon Event Calendar tucsonaudubon.org/birdathon

- APRIL 7 Birdathon Launch at Spring Wing Fling
- APRIL 19 Expert-led trip: Luke Safford & the Sweetwater Junkies team, Sweetwater Wetlands Park
- APRIL 24 Expert-led trip: Jennie MacFarland & Easy Doves It big-sit team, Tucson Audubon Paton Center for Hummingbirds.
- APRIL 28 Expert-led trip: Scott Olmstead of Tropical Birding & Scott's Orioles team, Santa Catalina Mountains
- MAY 18 Birdathon Wrap-Up Party at Borderlands Brewing, 5-10 pm



Try our Bird-themed Brew,
crafted by Birdathon sponsor
Borderlands Brewing.

Win Prizes and pick up your
2018 Birdathon Souvenir T-Shirt.

SPOT BIRDS  RAISE MONEY  SAVE WILDLIFE  HAVE FUN

Field Trips

Luke Safford, Field Trip Coordinator

To see full descriptions, more field trips, and to register, please visit tucsonaudubon.org/fieldtrips

Every Wednesday, Sweetwater Wetlands

(7 am in April; 6 am May–August)

Come join us as we explore the wilds of Sweetwater Wetlands on a weekly basis. This is a great time of year for migrating and returning birds like Tropical Kingbird, Bell's Vireo, Yellow Warbler, and Lazuli Bunting.

Tuesday, April 10, Tucson Botanical Gardens

(2nd Tuesdays of the month)

This walk is especially good for beginning bird watchers. Along the way Vivian MacKinnon will point out some of the many bird-friendly plants at the gardens and give ideas for how to bring birds into your own yard.

Saturday, April 21, May 5 & 19, Mason Center/Arthur Pack Park

An introduction to birdwatching basics and our Mason Center. Start with feeder-watching at the Center and then take a stroll to Arthur Pack Park to check out the golf course ponds.

Friday, May 4–Sunday, May 6, El Aribabi Conservation Ranch in Northern Sonora, Mexico

Looking for a low-cost Mexican birding adventure? Join Jim Rorabaugh and Gordon Karre for a two-night stay at El Aribabi Conservation Ranch along the Rio Cocospera, 35 miles south of the border in Sonora, Mexico, where many of the tough to find specialty birds of SE Arizona are much easier to spot. Cost: \$60/night for lodge or \$30/night for camping plus shared meals.

Monday, May 14, Boyce Thompson Arboretum

Enjoy the Arboretum during peak migration early in the morning, when it's cooler and less crowded. We should see migrating warblers, flycatchers and tanagers, as well as common desert species.

Saturday, May 26, Empire Cienega & Grasslands

As it gets warmer in the lowlands, it's time to check out the burned-over riparian areas of the ciénega for effects of the habitat change with Clifford Cathers.

Friday, June 15, Boyce Thompson Arboretum & Pinal Mountain

A journey up through a variety of habitats and transition zones gives us the opportunity for many different species from Blue Grosbeaks to Red-breasted Nuthatches. We'll meet at the arboretum, then head to Globe to explore the transition zone and higher elevations of Pinal Mountain.

Saturday, June 23, Carr Canyon

Upper-elevation warblers, flycatchers, tanagers, and more will be on the menu as we travel up this birdy canyon. Easy meandering on rocky trails and around campgrounds.



Sweetwater Birders, Henry Johnson; Five-striped Sparrow, Jim Burns; Summer Tanager, Lois Manowitz; Tufted Flycatcher, Scott Page

Living with Nature Monthly Program

Living with Nature 2017–2018 is Tucson Audubon’s free program series to entertain, inform, and educate. Guest speakers present topics related to bird biology and ecology, global and regional birding hot spots, and conservation issues that affect birds, wildlife, and their habitats. We have program locations in Tucson, Green Valley, and Oro Valley, although due to renovations at the Western National Parks Association venue the series in Oro valley ended in March. Bookmark tucsonaudubon.org/lwn or better yet, as a Tucson Audubon Society member you can receive a weekly e-newsletter.

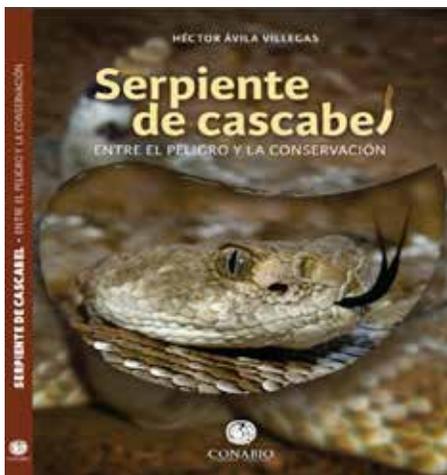
TUCSON

6:30 pm
REI Tucson, 160 W Wetmore Rd, Tucson, AZ 85705
To register, call 520-887-1938 or visit the REI store.

April 5

Rattlesnakes Abroad with Héctor Ávila-Villegas

Herpetologist Hector Avila grew up in central Mexico, roaming in the Chihuahuan Desert, where he learned about wildlife at an early age. During this talk, Avila will share his conservation insight and experience as it relates to an undervalued group of animals: rattlesnakes. His new book “Rattlesnake: between danger and conservation” is the first of its type in Mexico, combining scientific information with field observations and select photography. Published by the Mexican Commission on Biodiversity, this book is the end result of many years of work from groundbreaking field research of a ‘rattle-less’ rattlesnake endemic to Santa Catalina Island in the Gulf of California, a specialization at the Venoms Study Center in Brazil, and extensive literature review.



Ash-throated Flycatcher, Kendall Kroesen

May 17

Faithless Philandering or Cunning Cuckoldry? Costs and Benefits of Extra-pair Mating in Tree Swallows with Dr. Kelly Hallinger

For centuries, birds have been regarded as paragons of monogamy. The past 30 years, however, have cast their unfettered fidelity in a remarkably different light. New molecular genetic techniques have given researchers an unobstructed look at the private lives of birds and resulted in the startling discovery that cuckoldry is common, occurring in more than 75% of all species studied to date. Why promiscuous mating should be so common in the avian world remains an unanswered and contentious question. In this seminar, Kelly will introduce several hypotheses that have been put forward to explain the high incidence of promiscuous mating in birds. Then we get to delve into a detailed examination of one of these hypotheses using data from a long-studied population of Tree Swallows (*Tachycineta bicolor*) breeding in New York.

GREEN VALLEY

Saturdays, 10 am
Green Valley Recreation Desert Hills Center
2980 S Camino Del Sol, Green Valley, AZ 85622

April 14

Nestboxes: Building a future for our birds with Olya Phillips

Many cavity-nesting birds like American Kestrels, Ash-throated Flycatchers, Lucy’s Warblers, and many other species, suffer from loss of habitat, especially in Arizona’s expanding urban centers. The lack of mature trees means fewer nesting cavities for them to use for breeding. Tucson Audubon’s Citizen Science Coordinator, Olya Phillips, is going to talk about the conservation importance of urban nest boxes and what Tucson Audubon is doing to increase nesting sites for our cavity-nesting birds. Learn what you can do to attract these birds to your Green Valley home!

Events Calendar

APRIL

- 5 Living With Nature (Tucson)
- 7 Spring Wing Fling
- April 7–May 7 Birdathon 2018
- 9–14 American Ornithology Meeting
- 14 Living With Nature (Green Valley)
- 21 Patagonia EARTHfest
- 26 & 28 “Life of the Hummingbird” Class

MAY

- 17 Living With Nature (Tucson)
- 18 Birdathon Wrap Up Party

AUGUST

- 8–12 Southeast Arizona Birding Festival

Tucson Bird Count 2018— Urban Birding to Benefit Birds

Jennie MacFarland, Tucson Bird Count Coordinator

Urban birding has received a lot of attention lately as a great option to see birds close to home. There are often some very exciting migrant and wintering bird species found in parks and lush landscapes within Tucson and Green Valley. There are also the added benefits of urban birding being more accessible to underserved communities and young people. All in all, urban birding is great!

But 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 due to the extra water these landscapes receive and some folks

supplement the natural food supply with feeders. On the other hand, in Tucson urban areas often have “dead zones” of empty dirt lots and parking lots 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 six 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 into productive urban habitat. This effort has already begun with the five recipe cards for bringing native

birds into your yard. You can pick up these recipe cards at our Nature Shop.

We do need more birders 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

TUCSON · BIRD · COUNT



Bringing Birds Home

*An Evening Celebration of Year of the Bird & more!
Tucson Audubon's 10th Annual Fundraising Gala*

Fly!

SAVE THE DATE

Saturday, November 3, 2018

Westward Look Wyndham Grand Resort & Spa
Sonoran rooftop patio and ballroom, Tucson

It's Nestbox Season

Olya Phillips, Citizen Science Coordinator

Do you know the cavity-nesting birds in our area? There are more than just woodpeckers! Some birds adopt an existing hole for their nest instead of excavating their own. This makes them a secondary cavity-nester. Some of the ones you're most likely to see in your Tucson home are Lucy's Warbler, Bewick's Wren, Ash-throated and Brown-crested Flycatchers, American Kestrel, and Western Screech-Owl. These birds, like many others, are suffering from habitat loss, especially in Arizona's expanding urban centers. The lack of mature trees and high nesting competition means fewer cavities for them to use for breeding. That's the bad news. The good news is that the time is better than ever to start your own citizen science project in your own backyard. Create a bird-friendly space with native vegetation for food and cover, as well as a nice water feature for drinking and bathing. When you have great habitat you can put up a nice nestbox of your choosing!



All of the birds listed have a nestbox design available at our Nature Shop or you can build your own by following plans and instructions on our website: tucsonaudubon.org/nestbox. We are especially interested to hear from you if you have a Lucy's Warbler nest in your yard. They are one of the only cavity nesting warblers in North America (the other being the Prothonotary Warbler) with a short history of nesting in nestboxes. In 2017 Tucson Audubon launched an experiment to figure out which nestbox design is preferred by this species. After studying their successful nests we are now testing new nestbox designs for Lucy's Warblers, which are also available for purchase at our Nature Shop.

Some of you may have heard that nestboxes don't work in the desert Southwest because of the high temperatures. Quite the contrary. If you follow directions for putting up nestboxes responsibly, they have a great chance of being successful!

Bewick's wren, Philip Shoffner; Olya Phillips installing a flycatcher box;
Lucy's Warbler experimental replicates in Anza Trail, Tubac, photo by Olya Phillips

Come to our Nature Shop to get your new nestbox, and don't forget to follow these rules:

- Hang your boxes facing north or east to avoid harsh afternoon sun.
- Make sure there is enough cover for the nestbox. Heavily dappled tree shade is perfect at regulating heat underneath.
- If you are making your own nestbox, make sure that it has proper drainage and ventilation holes. You can follow construction plans we provide on our website.
- Put up your boxes as early as possible for spring arrivals. Lucy's Warblers are one of the early breeders, starting in mid-March.
- Supply adequate water, as well as plants for food and shelter. Parents rely on insects found on plants to provide much needed protein and calcium to their chicks.
- Keep your cats inside. Cats are curious and agile creatures that pose a great threat to both adult birds and chicks.
- Refer to the species-specific placement instructions on our website to know exactly where to place your nestbox. Each bird species will have a different preference in height off the ground and surrounding habitat.



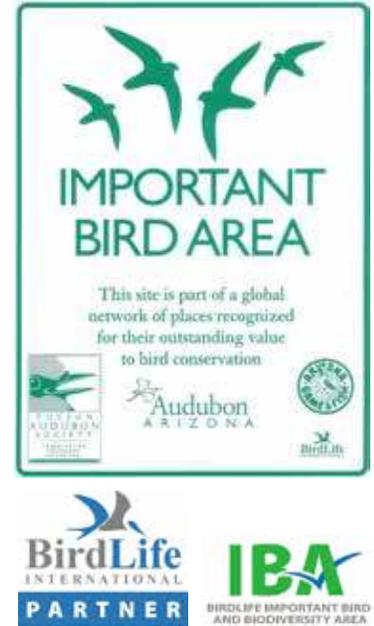
IMPORTANT BIRD AREAS:

Year of the Bird and a Global Network of IBAs

Jennie MacFarland, Bird Conservation Biologist



Grand Canyon, Florian F



It is likely that you have already encountered the Year of the Bird international movement to celebrate the centennial of the Migratory Bird Treaty Act, the most powerful and important bird-protection law ever passed. The campaign has been spearheaded by National Geographic, BirdLife International, Cornell Lab of Ornithology, and the National Audubon Society, and many community-level groups, including Tucson Audubon Society. The overarching goal is to inspire the general public with an understanding of how vital birds are to our planet and that many species are critically imperiled. Such a large scale effort with many partners is a great opportunity to highlight the similar nature of the Important Bird Areas (IBA) program. Tucson Audubon often highlights the news and successes of the Arizona Important Bird Areas Program, but did you know that we are part of a much larger effort? The nation-wide program for the United States is led by National Audubon, which is a partner in the global program led by BirdLife International.

BirdLife's Important Bird and Biodiversity Area concept has been developed and applied for over 30 years. Considerable effort has been devoted to refining and agreeing on a set of simple but robust criteria that can be applied worldwide. BirdLife aims to identify, protect, and manage a network of sites that are significant for the long-term viability of naturally occurring bird populations. Many sites are also important for other forms of biodiversity, so the conservation of Important Bird & Biodiversity Areas ensures the survival of a correspondingly large number of other animals and plants.

BirdLife Partners have, to date, identified and documented more than 12,000 sites in over 200 countries and territories worldwide, as well as in the marine environment. When complete, the global

network will likely comprise approximately 15,000 IBAs covering some 10 million square km, which is 7% of the world's land surface. Birdlife has also facilitated legally binding protection for over 2,000 Important Bird and Biodiversity Areas and has established over 2,000 Local Conservation Groups that monitor, manage, and protect their Important Bird and Biodiversity Areas.

The Global IBA program maintains the list of "trigger" species (those for which sites are selected for Global and Continental Status) and associated population thresholds to be used for each IBA category, and makes sure the criteria are applied in a consistent and common-sense way, thereby ensuring consistency and the maintenance of standards. This is the list that includes Chestnut-collared Longspur, for example, which led to San Rafael Grasslands and Las Cienegas NCA being recognized as Global IBAs.

This network may be considered the minimum essential to ensure the survival of many of these species across their ranges and throughout their life cycles. Because some places are much richer in biodiversity than others, conserving a relatively modest network of sites is a cost-effective and efficient way of ensuring the survival of a large number of species.

As a member of Tucson Audubon you are helping to support this larger global effort within Arizona. If you volunteer as an IBA bird surveyor, you are a partner in this larger network. Help celebrate the Year of the Bird: get out there birding, visit IBAs, help with our survey opportunities listed at aziba.org. You can also use the #BirdYourWorld hash tag to share your birding experiences whenever possible and help spread the love of birds.

Paton Center Birding and Planning in Full Swing

Jonathan Lutz, Paton Center Coordinator

During the first 70 days of 2018, 101 species of birds were recorded at the Paton Center for Hummingbirds. The property received a record number of visitors during the same span—an estimated 4,557 daily visits—compared to 3,156 in 2017. Late spring and monsoon season project to be some of best and busiest birding of the year, especially if uncommon birds continue to make appearances. Rufous-backed Robin, Ruddy Ground Dove, and Cassin's Finch were big draws in the first quarter of the year.



A Cassin's Finch and an American Goldfinch, uncommon birds for the region, sharing the same feeder at the Paton Center

This year began with a renewed conversation among board members and staff about replacing the Paton home. As the Paton Capital Campaign enters the homestretch for meeting a goal of \$450,000 raised, Tucson Audubon's decision makers are looking closely at ways a replacement of the main house can benefit staff, volunteers, and visitors alike. The planning process is also taking into account qualities like the flow of pedestrian traffic, privacy for an on-site staff member, and how features of a new building can facilitate maintaining clean, healthy feeders for the birds. For the remainder of 2018, the main house will continue to be used as a field station, office, break area, prep kitchen, and retail space.

Identifying new revenue streams to support the operation of the Paton Center will be an important part of the current planning effort. Visitors' donations to the onsite Sugar Fund generated \$16,448 in 2017, a 4.5% increase from the previous year. Visitors responded well to a small offering of t-shirts, ball caps, and books for sale in the Paton Shop—an endeavor that's continuing in 2018 and could expand with a new building. A handful of major donors continue to support the majority of Tucson Audubon's operations in Patagonia, and the organization is deeply appreciative of their support.

TUCSON AUDUBON SOCIETY'S

PATON CENTER *for* HUMMINGBIRDS CAPITAL CAMPAIGN

Less than a year ago, Tucson Audubon Society kicked off a capital campaign to redevelop the Paton Center for Hummingbirds, one of Southeast Arizona's most revered birding destinations. **The Paton Center received nearly 14,000 daily visits in 2017.** Birders, photographers, and nature lovers from all 50 states and 20 foreign countries visited the property last year.

Your help is needed to complete the redevelopment of this beloved preserve. **We are only \$90,000 away from our goal** and the ability to move forward with plans to redevelop this important site that will serve nature lovers for many years to come.

Can we count on you for a donation to this important effort? A gift of any size will be meaningful towards preserving the legacy of the Patons. **Make a gift today and your donation will be doubled**—the result of a donor challenge that matches contributions, dollar for dollar, up to \$100,000.

Donate online at tucsonaudubon.org/patoncampaign or by calling Diana Rosenblum at 520-209-1802.



Violet-crowned Hummingbird, Nick Beauregard

VOLUNTEER SPOTLIGHT *Tucson Meet Your Birds*

What a wonderful morning spent at Sweetwater Wetlands where 42 Tucson Audubon Volunteers welcomed over 550 people to “meet their birds!” This was our third year organizing this event in partnership with Tucson Water. The volunteer contribution continues to grow, making the event better each year. Thank you to all who helped before, during, and after Tucson Meet Your Birds!!



Mini-field trips throughout the event were a huge hit with attendees. Dorian Escalante (pictured here), Daniel Clark, and Doris Evans did a great job managing big crowds of new birders. Thank you to those who helped them, too! Photo by Henry Johnson



Volunteers Sandy Fabritius and Marcia OBara are ready to greet you at the entrance to the wetlands. Beautiful smiles are one of the best things you can see in our volunteers! Photo by Joanna Strohn



Binoculars are a necessity when going out birding, and during the event Elaine Wychreschuk (pictured here) and Linda Arredondo were kept busy loaning them out to dozens of new birders. Photo by Joanna Strohn



Volunteer Lynn Waltke shares her scope views with a new birder. Birding Facilitators were set up around the wetlands with scopes for attendees to look at Snowy Egrets, Green Herons, Cinnamon Teal, and more. Photo by Joanna Strohn

Thanks to everyone who came out to Ft. Lowell Park and celebrated the accomplishments our volunteers made in 2017, which includes over 11,440 hours of recorded hours!



Volunteer Appreciation, Matt Griffiths

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

Welcome New Members

Lindsey Abrahams, Jean & Vick Applegate, Deaver Armstrong, Linda & Evan Arredondo, Deidre Asbjorn, Jan Bacigalupo, Kathleen Bangs, Terry & Ken Beall, Cheri Beaulaurier & Steve Sox, Cathy Beck, Stephanie Bergsma, Deborah Billingsley, Gayle Blair, Carol Bouska, Sherree Brasher, Carol Brodie, Donna & Jim Burton, Monica Campbell, Raquel Cantu & John Framstad, Lisa Caprina, Ann Carlson, Leyla Cattani-Pialorsi, Gregg Chance, Jane Kollmeyer & Terry Chute, Aaron Clapp, Ken Minkoff & Christie Cline, Catherine D'Amato, Casey Davidson, April Day, Marla Domino & James Glover, Jack Doyle, Jon & Joy Duerr, Ruth Edmark, Leslie Epperson, Murray Flagg, Jan Foiles, Julie Force, Patti Caldwell & Bob Gary, Elaine Gerhardtstein & Christopher Wong, Sharon Gilchrist, Stan Gillett, Melissa & Bob Good, Greg Goodrum, Joy & Dave Haack, Heather Hall & Ned Preble, Georgiana Hall, Laurens Halsey, Pam & Stan Hart, Hamilton Hayes, Richard Heckert, Mark Hiemstra, Clive Hodder, Dennis Hoer, Cynthia Hudson, Cynthia Wicker & Kent Jacobs, Volker Jeschonnek, Cynthia & Dan Johnson, Susan & David Joplin, Janice Juszcak, Mark Kelley, Kathleen Keryan, Barrie & David King, Lea King, Mark Klaver, Cass & Tony Knight, Deborah & Randall Komisarek, Judith & Donald Kramer, Joanie Sawyer & Rob Kulakofsky, Gisela & John Kutzbach, Louise Lacaille, Katy Lamb, Shari & Douglas Larson, John Leech, Mark Leggett, Cheryl & Nelson Lehman, Richard Leis, Ellen Levey & Michael Dunn, Ronald Locke, Victoria Mackintosh, Diana Manning, John Marsh, Terri & Douglas Martin, Bernadette Jilka & Gary Maskarinec, Maureen McConmack, Rae & Frederick Moeller, Millard Mott, Jessica Novak, Floy & Lewis Parkhill, Lenore & Bob Perna, Olya Phillips, Peter Pleasants, Nancy & James Poling, Dr. & Mrs. Howard Pope, Cecilia & Richard Quade, Bill Reeves, Pat Rice, Jay Rietmulder, Lori Fujimoto & Bob Rigel, Eddie Roberts, Janie Rodriguez-Roe & Franklin Roe, Grant Romrell, Shari Rosenbloom, Rose Ann Rowlett & Richard Webster, Robert Ruszala, Janie & Terry Saxton, Cathy Scheiman, Randy Selig, Deirdre Sheerr-Gross, Mary Shelor, Mary Sheridan, Mary Sibayan, Rachel & Tony Simms, Lesley & Elliott Smith, Loren Smith, Mary & Jay Smith, Ellen Sosin, Dale Spall, Evelyn Spitzer, Dennis St. Germaine, Marlys Stapelbroek, Carol Evans & David Steenburgen, Bets Stover, Peg & David Sudol, Linda & Doug Syme, Raymond Thompson, Judy Thorson, Dawn Tietjen, Amanda Timmerman, Tom & Hope Maxey, & Kristi Tynan, Karen Vandergriff, Kyle Vermillion, Robert Victor, Sharon Volk, Freda Walker & Albert Wagner, Sandy & Wayne Walter, Jan Wasson, Beth Williams, Lois & Malcolm Wilson, Max Wilson, Sandra Winters, Loretta & Rick Wolf, Brian Yen, Terri Young



Burrowing Owls, Paul Bannick

Frequent Flyers

Craig Anderson, Susan Atkisson, Matt Bailey, Ardeth Barnhart, Melanie Builder, Shawn Burke, Carianne Campbell, Marilyn Carney, Karen Chandler, Janet Cohn, Mich Coker, Christopher Cokinos, Christine Curtis, Sandy Elers, Kimberly Fitzpatrick, Peggy Ford, Judy Heffner, John Kennedy, John Henry King, Bob King, Susan Kozacek, Suzanne Long, Marcia OBara, Erin Olmstead, Lorel Picciurro, Jean Rios, Jeff Schlegel, Deb Vath, Frances Ann Walker, Nancy Young Wright, Claire Zucker

Gifts In Honor/Memory

In memory of R. Michael Andersen from Carolyn Andersen, Maxine & Richard Andrews, N. J. Austin, Gail Barker, Dale Belknap, Lori Belknap, Julie Bloom, Emerson Bodell, Patty Bowman, David Clark, Genevieve Ellefson, Susan Ford, Margaret Gervich, Fran Hermanson, Kelli & Wade Johnson, Sherry Kantzler, Marcia & Harlan Keibel, Marna & Eric Keibel, Daryl Kelehan, Alison Kennamer, Anne Lashier, Lois & Joseph Mattecheck, Cathie & Brian Meng, Suzanne & Stanley Penzotti, Debra Ruddick, Dan Salmon, Kimberle Schryver, Kay & Mike Seger, Lynn & Mark Smith, Donna Spilman, Marilyn Stenberg, Juli & Michael Umetsu, Margaret Zeran

In honor of Katharine Beale from Kate Beale

In honor of Jane C. Reichart from Jan Bell

In honor of Charles Bush from Charles Bush

To Virginia Lee Caldwell from Patti Caldwell & Bob Gary

To Wendy & Adam Nelson from Mary Caldwell

In memory of Cornelius "Rip" Hughes from William Case

In honor of Robert Casler from Carla & Robert Casler

In honor of Canny Clark from Susan Clark

To David Cowan from Deborah & David Cowan

In honor of Ed Curley from Ed Curley

In honor of Jean De Jong from Jean De Jong & Joseph Watkins

In honor of Timothy Demers from Deirdre Demers

In honor of Nancy Deucker from Nancy Deucker

In honor of Barbara Dickison from Barbara Dickison

In honor of Nancy Farina from Nancy Farina

To Terry Flynn from Lisa Flynn

In honor of Laura Franklin from Laura Franklin

In memory of Emma Jean Pointer from Dorothy Gyurko

In honor of Lesley Wade from Brandon Herman

In honor of Pat Hodgson from Sayre Hodgson

In honor of Sylvia VanGundy from Elizabeth Hoffman

To Barbara Croft from Helen Holliday & John Baffert

In honor of Gloria Howard from Gloria Howard

In honor of Thomas Huels from Thomas Huels

In memory of Mary Miner Carson from Debra Huffman & Arthur Sanders

To Michael Hyatt from Michael Hyatt

To Ruth Jacques from Nancy Jacques

In honor of Dorothy Johnson from Dorothy & Henry Johnson

In honor of Ruth & Steve Russell from Mark Kot, Carol & David Vleck, Mary & Skip Walker

To Janis Smith from Nancy & Terry Lutz

In memory of Ruth Hileman from Karen & Gilbert Matsushino

To Mark Menefee from Mark Menefee

In honor of Carolyn Meredith from Marc Meredith

To Norman Ferrell from Alvin Moore

In honor of George Murphy from George Murphy

In honor of Rick Unklesbay from Margaret Norem & Rick Unklesbay

In honor of Barbara Retzlaff from Barbara Retzlaff

In honor of Cathryn Rose from Cathryn Rose

To Linda Benjamins Mitchell from Joan Scurran

In honor of Hugh McCrystal from Deirdre Sheerr-Gross

To Hazel Simpson from Sylvia Simpson

In honor of Lynda Smith from Lynda Smith

In honor of Jane Tobin from Jane Tobin

In memory of Raymond Ukura from Butch Ukura

To Dortha Brown from Peggy Vale

To Joseph Wallace from Joseph Wallace

To Roger Wolf from Cheryl Lockhart & Roger Wolf



2018

YEAR OF THE BIRD



I really love the idea of Year of the Bird! I believe it's so important to emphasize birds and the impact that they actually have on the environment. I'm passionate about birds and conservation, so being able to celebrate them and show the world how they affect our way of life is so great! Even though this is just another year, it's one big special year for us to bring the joy of birds to our communities and the people around us. It makes me so happy to know that I'm not the only one in the world who cares about birds because sometimes, especially at school, it seems like I am. I wish that bird celebrations like this would go on all the time.

Dorian Escalante

Student and Tucson Audubon Volunteer



To me, birds are the world's great messengers. They demonstrate great resilience as they weather storms. They are reminders of hope and beauty as they soar above us. Birds are also, of course, the proverbial "canary in the coalmine." They are indicators of shifts and changes in the world. As our climate warms, storms intensify and we continue to greatly alter lands and habitats, birds are sending us messages of hard times to come. Shifting migration patterns, shrinking populations, and changes in the species we see are all messages we need to be paying attention to. So for me, Year of the Bird is about hearing these messages and taking actions to protect the future of birds, and in doing so, ourselves as well.

Nicole Gillett

Tucson Audubon Conservation Advocate



In recognition of the Year of the Bird, I plan to apply my background and skills in biology by participating in as many Tucson Audubon bird surveys as possible, contributing to the overall knowledge of bird populations. I also look forward to contributing to the eBird database through surveys in areas under-utilized by birders, especially my summer home in rural Idaho. My Habitat at Home project is entering its second year and I am looking forward to adding to my inventory of native plants and sharing what I've learned from this project. This year I also plan to return to my former Peace Corps assignment in the village of Puerto Lara in Panama to teach birding skills to the residents. The goal is to help increase their awareness of the value of their natural resources, especially birds, and hopefully curtail the destruction of the habitat.

Sue Kozacek

Tucson Audubon Volunteer

Year of the Bird is a campaign that celebrates the wonder of birds and provides an opportunity for people everywhere to recommit themselves to protecting all bird species. This campaign has a focus on conservation, citizen science, and the plants for birds program to mark the centennial of the Migratory Bird Treaty Act. Three organizations, the Cornell Lab of Ornithology, Birdlife International, and National Geographic, have formed a coalition with National Audubon to support this 2018 effort. Learn more at audubon.org/yearofthebird.

Tucson Audubon's recently relaunched Habitat at Home program is an excellent way for anyone to get involved in Year of the Bird. The program helps Tucson residents conserve water while creating a beautiful, bird-friendly landscape that lowers utility bills and reduces maintenance. Promoting Year of the Bird in conjunction with Habitat at Home will show how people, birds, plants, and water are vital, and interconnected.

Tucson Audubon and its many supporters are excited about Year of the Bird! Read on to find how some of them are involved.



Yeah, yeah, in my heart every year is “Year of the Bird,” and has been since I was an adolescent. However, this year is special since it marks the centennial of the MBTA (Migratory Bird Treaty Act). So what does this year mean to me now? Because of recent attacks upon the MBTA it means I’ll be kicking it up a notch and venturing outside my comfort zone. In addition to the normal (celebrating, showing, documenting, and eBirding) I’ll be watching and contacting policy makers, ensuring the power of the MBTA and other environmental legislation remains strong in times of amending and reinterpreting the law.

Laurens Halsey

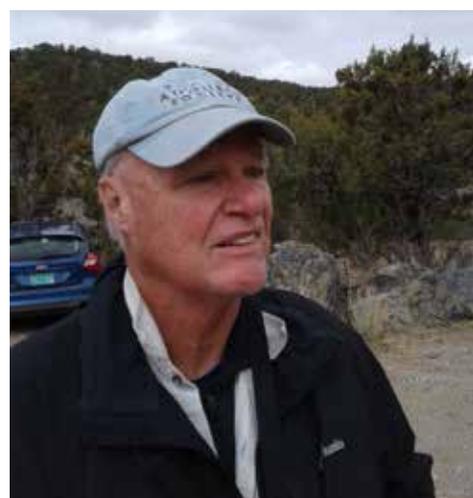
*Tucson Audubon Board member
and owner of Desert Harrier Birding
and Nature Guide Services*



Birds have always been a big part of my life. Last year my parents and I represented Tucson Audubon in Washington DC lobbying to protect the Arctic National Wildlife Refuge. We also visited Representative McSally’s office here in Tucson and I got an op-ed published in the *Arizona Daily Star* about it. To me, Year of the Bird represents all the work that so many people have done on behalf of their love of birds, whether it be something as simple as becoming a member of Tucson Audubon, or doing work on a larger scale. This year, I plan on attending young birders camp and participating in other Tucson Audubon events.

Phoebe Drew Moore

Student and Tucson Audubon Supporter



Of all the places in North America to celebrate the Year of the Bird, it is hard to imagine a better place to be than southeast Arizona, my home. We, as residents, and the visitors who come here, are treated to a vast diversity of species to admire and appreciate on a daily basis. As a way of giving back I very much enjoy volunteering for Tucson Audubon at Paton’s Center for Hummingbirds in Patagonia, which is open to the public 365 days a year. Through the efforts of the director, Tucson Audubon staff, and the many volunteers, we are constantly working to improve the habitat for birds, and provide them with a safe and sustaining site whether as resident birds, or in migration.

Thor Manson

Tucson Audubon Volunteer

Habitat at Home Featured Naturescape

LaNella Gaines,
Community Outreach
& Program Director



The front yard of the Hammond-Fales residence just after re-landscaping. Sara Hammond

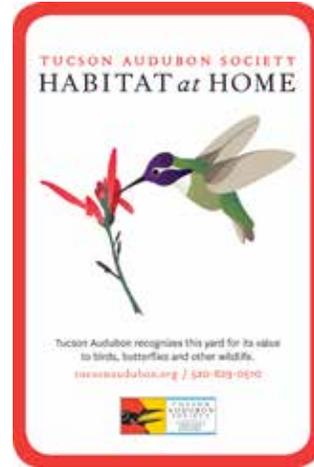
Earlier this year I was able to begin site visits to residents who have transformed their yards into beautiful, sustainable “naturescapes.” My learning journey took me to the Hammond-Fales residence, where Sara and Dave have lived for 25 years. Their community is in midtown Tucson, a hop, skip and a jump away from the University of Arizona and downtown. The area is diverse with people from all different backgrounds. Sara and Dave truly call this community home after moving from Maine in 1993. The feeling of home is what I definitely felt as I drove up to their residence on a very warm afternoon in February. I immediately noticed the front yard, full of native desert plants complete with basin and berm landscaping. What is interesting is that on the way to their home I noticed houses in the area that had no plants with a completely rocky landscape. After greeting this lovely couple, they informed me that all the properties looked like that when they arrived. Apparently, it was a popular landscape choice at that time. All I wondered was how can these residents keep their homes cool and that electric bill under control in the summer? The hard truth is they can’t, and they may not know otherwise.

The couple’s front yard is gorgeous, with mesquite, desert willow, palo verde, and ironwood trees, an aloe plant, and two young saguaros. Parry’s penstemon, justicia, fairy duster, desert hackberry, desert lavender, wolfberry, trailing indigo, and acacia all appear in the landscape. The front yard is set up with a 205-gallon cistern to collect rainwater from the roof, and there is also a very large and impressive observation bee hive in the carport that Dave built. The backyard is even more spectacular as I walked into a habitat oasis complete with splendid fruits trees: apricot, pomegranate, orange, grapefruit, and lemon. Birds were busy chirping in the nearby privet hedge and hop bushes. I spotted a Cactus Wren, Curve-billed Thrasher, White-crowned Sparrow, Lesser Goldfinch, and Anna’s Hummingbird. Just in this week, Sara informed me that cardinals, Mourning Doves, and Gambel’s Quail have also taken up residence. An even larger 865-gallon water tank was firmly placed next to the house for added rainwater collection. Sitting high up in an old mesquite tree is an uninhabited bat house, another project of Dave’s. He commented that they were having trouble finding a visitor to roost in it. Toward the back of the yard is a chicken coop

with six clucking away and supplying fresh, organic eggs. They now have a total of eight chickens! Beyond the coop lies a new spring garden and to the far left is a large composting bin. As we stood by observing, the Anna's Hummingbird came to pay us a very close visit. Sara commented that she had never seen one come that close to anyone and linger for a few moments the way that it did.

I asked Sara and Dave why they embarked on such a labor of love in creating their habitat at home. They explained that, in addition to making the commitment to living sustainably, they did it for the birds.

Please join me as I continue on my learning journey. Spring is planting season! The Habitat at Home program is open for registration. Visit tucsonaudubon.org/habitat, email habitat@tucsonaudubon.org, or call 520-209-1808 to learn more.



Dave Fales and Sara Hammond have transformed their once-barren yards into lush naturescapes. Photos by Sara Hammond and LaNella Gaines

Habitat at Home Plant Profile: Desert Mistletoe

Lynn Hassler, Nature Shop Garden Volunteer Captain

Scientific name: *Phoradendron californicum*

Family: Viscaceae (Mistletoe)

Native range: Desert regions from southern Utah and Arizona to southern California and northern Mexico generally below 4,000 feet

Wildlife value: Host plant for caterpillars of the Great Purple Hairstreak. Clumps provide roosting and nesting sites for many birds. Its berries are eaten by Phainopeplas, Pyrrhuloxias, cardinals, woodpeckers, Verdins, White-crowned Sparrows, House Finches, mockingbirds, thrashers, quail, thrushes, waxwings, deer and other mammals

Mention of the word “parasite” causes some to wince and it’s no wonder, given this definition: “An organism that grows, feeds, and is sheltered on or in a different organism while contributing nothing to the survival of its host.” While one might believe that freeloading of any kind is a bad thing, this is not necessarily the case with biological parasites, which are part of the natural order and are absolutely integral

to healthy ecosystems. Such is the case with the oft-maligned desert mistletoe. Its strategy is to root on the trunks and branches of various “host” plants (often in the legume family) and to live off of them by stealing water, minerals, and nutrients.

Mistletoe grows in clumps and often forms great masses, occasionally killing off branches, which is why it gets a bad rap with gardeners. Very heavy infestations may kill a tree or shrub, but mistletoe is not harmful in small quantities; control clump size by removing manually. This is a plant to be managed rather than eliminated, and local wildlife will thank you for leaving some in place.

In fall and winter in good years female plants literally drip with small, lightly colored red-orange berries that attract scores of fruit-eating animals. Although many different kinds of birds feed on the berries, it is the Phainopepla that is primarily responsible for the spread of the plant. Mistletoe berries are a dietary mainstay for these birds.



Phainopepla on mistletoe, Doris Evans

Phainopeplas have specialized digestive systems that enable them to process the berries while leaving some seeds intact for dispersal, and in a wonderful feat of nature end up planting their own future food supply. After passing through the birds’ digestive tracts, remnant seeds are deposited on the branch of an appropriate host plant where they penetrate the bark and germinate. Phainopeplas often make further use of mistletoe by building their nests directly within the dense tangles.

A Young Birders Summer Weekend

Homer Hansen

It's midday, you are sweating, having finished a birding hike in the Chiricahuas. You review your life list—12 new birds! You recall watching the Brown Creeper forage like a piece of bark moving up the pine. Then the House Wren carrying agave silk into its nest cavity. And even more new life experiences. Can you recall a better day?

—Introductory quote for the annual Arizona Young Birders Camp held the 2nd weekend of June at the Southwest Research Station in the Chiricahua Mountains (inspired by Elliott Coues)

Do you remember your first birding experience? Your first identification? The excitement of adding a lifer? Your amazement at an unexpected bird behavior? All of these are the essence of the Arizona Young Birders Camp, an opportunity for youths between the ages of 8 and 18 to experience the pleasures of birding while learning about ornithology.

The first camp was held in 2015 as an extension of the activities offered by the Sulphur Springs Valley Young Birders Club. The camp is offered to youths throughout Arizona with a focus on drawing and retaining young birders from small rural communities. Over the past three years it has attracted over 40 attendees from sixteen cities and towns, including Duncan, Dagoon, Buckeye, Tonopah, Sedona, and Willcox. The broad age range allows for the younger kids to learn from their older peers. “Our boys were so welcomed by the very accepting, very kind, older kids who were willing to teach them great stuff,” wrote Mary Stewart about her 8 and 9 year olds. “I can’t tell you how many times in the last 24 hours Victor and Andreas have begged to go back next week to Bird Camp!”

The camp is run entirely by volunteers. Vivian MacKinnon, who has helped out since the camp’s inception, noted that “each adult leader brings different skills and each youth has different needs and interests. There truly is something for everyone.” Each day of camp offers morning field trips and afternoon classroom exercises

covering a diversity of themes. The Chiricahuas offer an endless number of species to review: trogons, owls, warblers, and more. Birding skills are presented in workshop format, combining both presentations and hands-on activities. An important theme, Birding Ethics, is an annual topic. “The kids really took it to heart and were always reminding each other to be good birders and to put the birds’ welfare before their own desire to see it,” Vivian observed while leading field trips.

The field trips often start at the established bird feeders in Portal, then move up through the various habitats as the elevation changes. The leaders highlight local specialties, but make sure to talk about the ecology of the birds observed. “One of the neatest things I learned was how the species of birds changed the higher you go up the mountain,” says young birder Sierra Pralgo, “also that we have some of the same birds as Central and South America.” Of course it is always exciting to see a new species as well. Dorian Escalante told about his very first year at camp, “When I saw the camp brochure, I saw the Red-faced Warbler on the cover—I was so excited to maybe see it, then two days into camp I saw it! The camp was my first birding trip ever and this was an awesome, hard-to-find lifer!”

In the classroom, the leaders give presentations on bird song, a species “spotlight” such as the Elegant Trogon, and a review of birds seen. Each year the camp focuses on a theme, with 2017 highlighting



Scoping shorebirds at Cochise Lake in Willcox enroute to the Chiricahua Mountains.



Everyone is ready to look for owls in Cave Creek Canyon.



David Hosey, Victor Santa Cruz, Dorian Escalante, and Jonathan Collins draw and label the parts of a feather.



Margy O'Brien shares her sketchbook with an attentive audience!

how to sketch birds with Margy O'Brien, an artist and instructor from Albuquerque, who brought drawing to life. While explaining avian anatomy basics she had the youths and leaders all out of the chairs and assuming bird postures. Margy emphasized it is all about drawing to learn, not learning to draw. "Drawing is another tool to learn about the birds and building your power of attentiveness and appreciation for your subject," said Margy. Speaking about her teaching experience at the camp, Margy said what really impressed her "was how everyone, leaders and kids, were immersed in the experience and everyone was helping each other."

The last night wraps up with the youths giving their own presentations! Interesting, educational, and nerve-wracking, the kids talk about hummingbird banding, owls, or another topic of interest. "I felt nervous right before the presentation, but afterwards I felt like I had done a good job!" recalled Josiah Mascarenas. Among those who have attended camp more than once, it is impressive to see their skills improve over the years. Cindy Traylor, one of the co-founders, notes that she is "constantly impressed with what the kids have learned, and hopes that the camp will be instrumental in forming a lifelong interest in birding and nature."

At the end of the weekend, perhaps the most significant learning experience for these young birders goes beyond the field trips and classroom exercises. While watching the youths bond and play

around, one practically reels in the enthusiasm radiating from them. Birds are amazing and these kids know it and have shared these moments with their peers. As Sierra Pralgo said, "I learned lots of other people are just as interested in birding as I am" —they have become part of a larger community. These young birders are our future, and most importantly, the future for our birds.

Homer Hansen is a co-founder of the Sulphur Springs Valley Young Birders Club and Arizona Young Birders Camp. He instructs workshops for the Tucson Audubon Society, American Birding Association, Western Field Ornithologist conferences, and numerous birding festivals. Homer currently serves on the WFO board as chairman of the Youth Programs Committee. He lives in Willcox, Arizona.

The 4th annual Arizona Young Birders Camp will be held June 8–10, 2018. For more details or to support the young birders camp email admin@the-cranes.org.



Southwest Research Station, Deb Vath



Jeff Babson, Josiah Mascarenas, and Vivian MacKinnon spot a bird!



Sierra Pralgo attentively studies a feather during a workshop on feathers and wings.



This Northern Pygmy-Owl was observed feeding a fledgling.

My Pima County Big Year, in just 365 days!

Using eBird as a Tool for Your Big Year

Brian Nicholas

Since moving to Arizona most of my birding was done inside the boundaries of my neighborhood in northeast Tucson, which has been very rewarding. Yet one drawback to neighborhood birding is that your field skills are limited to the birds in your area. I needed to expand my overall knowledge of birds and habitats, so for the past several years I extended my “neighborhood” to include all areas within Pima County. Last year, as an additional incentive to explore my new “neighborhood,” I decided to attempt a personal big year within the boundaries of Pima County, setting a stretch goal of 320 species.

The success of my big year had more to do with the accomplishments of the surrounding birding community than from all my endeavors. To adequately cover all the rich areas in our county requires a group effort, and effective tools to share this information. The resource I relied upon most for my big year was eBird (ebird.org), particularly for real time information on daily sightings. It was a great way to record my sightings and pictures, and to track my totals for the month and year. I would scan its database each day before leaving work to determine where to bird on my way home. At night I would browse historical bar charts for unusual species, creating target lists each month based upon migration patterns. I regularly reviewed bird lists submitted to eBird “hotspots,” which are defined as public locations regularly visited by birders.

Ruddy Ground Dove, Francesco Veronesi



One such hotspot I discovered in my searches was listed as “Santa Cruz River South of Renaissance Road,” which had 36 total species reported at the time I visited in February 2017. I was so impressed with my first visit to this location that I kept going back to this pond and island surrounded by reeds and a few cottonwoods. Each visit brought a new mix of birds including swallows, sandpipers, egrets, ibis, and ducks. Other birders began visiting as well. Then, last November it became the best location to see 12 Cackling Geese who had stopped over in migration, which increased its popularity



The ponds at Santa Cruz River South of Renaissance Road, Brian Nicholas



Cackling Geese, Brian Nicholas

tenfold. At last check this new popular hotspot had a bird list of 120 species with over 30 birders submitting lists. Wow!

By far the eBird tool I used most during my big year was the Rare Bird Alert, which showed confirmed and unconfirmed rarities recently seen for the county and state. eBird has dedicated reviewers who validate these bird sightings, and who are a great source of feedback. I always try to submit a picture of unusual birds seen to make their job easier.

Early in January last year I found an eBird report of a rare Streak-backed Oriole, which was seen at Arivaca Creek during a Tucson Audubon field trip. The Arivaca Creek trail goes through rich riparian habitat that is popular with avian migrants. I had first discovered this hotspot while cruising through bar charts, finding it to be the most reliable place in Pima County to see Thick-billed Kingbirds, an uncommon nesting species in Arizona. Later that year I would also refind a Hooded Warbler along the creek, my sole sighting of this species in 2017 (first found at Arivaca Creek by Keith Kamper and Patty Tersey).

The Streak-backed Oriole found would be a nice addition and a lifebird. I raced out the next day on a search for the bird, where I met

Karen Kluge and Terry Rosenmeier. Although the oriole could not be found, we did flush a few Common Ground Doves, which perched on a mesquite branch. I noticed one of the birds contrasted in color to the others with a dull pinkish tinge. Could it be a Ruddy Ground Dove? I couldn't make out too many details at that distance, but was able to get a few pictures through the maze of branches. Even when I downloaded the pictures at home it was hard to make a call on what species it was, so I enlisted the help of Andrew Core and Laurens Halsey, two eBird reviewers. They were able to confirm it as a Ruddy Ground Dove, which was new for the year and a personal lifebird. I'm thankful to have such valued resources as eBird, their expert team of reviewers, and input from our birding community who all help guide us to a better understanding of the birds we see.

I would recommend a county big year to any nature enthusiast wanting to discover birds close to home. Read this column in future issues for more of my adventures from 2017 and hope to see you in the field!

Brian Nicholas is a birding enthusiast who has lived in Tucson for about 20 years. His primary focus has been birding his neighborhood in northeast Tucson, where he has seen around 250 species. Aside from volunteering at Tucson Audubon as an IBA bird surveyor and field trip leader he also supports conservation by living a vegan lifestyle.



Thick-billed Kingbird, Martin Molina



White-faced Ibis, Brian Nicholas

TUCSON AUDUBON SOCIETY'S 2017 ANNUAL REPORT

In 2017 Tucson Audubon Society continued and expanded its leadership role in southeast Arizona enabling our talented staff, volunteers, members, and others to enjoy and protect birds through recreation, education, conservation, and restoration of the environment on which we all depend.

We accomplish our mission each day in partnership with our members, donors, volunteers, and community organizations. We value your passion and enthusiasm for our mission and are grateful for your investments of time, talent and financial resources. You inspire us!

The close of 2017 brought with it the transition of our executive director, presenting Tucson Audubon Society with the opportunity to attract a new leader and the promise for continued growth and strengthening of our programs and services in the coming years.

In this annual report, we share highlights from our work over the past year. We appreciate the many ways in which we connect with our community and strive together to be a strong voice for birds, wildlife, and the habitats required to ensure a more bird friendly world. Thank you!

With warmest regards,



Les Corey
President, Board of Directors

Paton Center for Hummingbirds

- Shared the Paton Center with nearly 14,000 visitors from all 50 states and 20 foreign countries; plus 3,000 social media followers
- Launched a capital fundraising campaign to rebuild the multipurpose residence and reached more than 75% of our goal
- Completed a beautiful new shade structure in the backyard area
- Developed a front yard feeding station, including streamside overlook and installed a birds of Patagonia mosaic panel
- Began work along Sonoita Creek upstream of Paton Center; installed 623 native plants and made first and second pass removal of 4 acres of Johnsongrass
- Installed rock retaining wall and ADA ground surface around Paton backyard viewing pavilion; landscaping around PACA mural; new stream water feature behind pavilion; hundreds of new plants around site (leading to 50+ species of butterflies seen on site); installed first 4 of the Homestead Era Fruit Trees for the Paton Orchard

Conservation

- Got 3 new AZ Important Bird Areas designated: Tucson Mountains, Tucson Sky Islands, and Las Cienegas
- Launched full scale scientific study with Lucy's Warbler nesting preferences experiment
- Began facilitating Pima County habitat monitoring in support of the new Section 10 Multi-species Conservation Plan
- Finalized "Bringing Birds Home" Landowner Restoration Guides for Grasslands and Riparian Areas in partnership with Arizona Audubon
- Completed another year of Yellow-billed Cuckoo breeding-season surveys with the Coronado National Forest, this time also including cutting edge sound recorders that tracked every birdcall in range
- Most Elegant Trogons ever counted during the annual trogon surveys (160)

Restoration

- Further baseline surveys and writing of the Lower Santa Cruz ILF project Restoration Development Plan
- Swan Wash Restoration Project planning stages with Changemaker High School and partners
- Agrivoltaics urban conservation and restoration project with Rincon/University High School and partners

Tucson Audubon Staff; New pavilion at the Paton Center for Hummingbirds



Outreach and Publications

- Welcomed almost 5,700 people to our Nature Shops
- Engaged with new and existing audiences in a variety of activities through our Year of the Hummingbird campaign
- Offered 10 adult education classes to 100 participants
- Held 19 Living with Nature programs attended by 1,479 people
- Presented 47 full and 18 mini lessons for our Year of the Hummingbird Urban Hummer Program to 1,461 students in 6 school districts
- Tucson Meet Your Birds at Sweetwater Wetlands attended by over 600 people
- Distributed over 14,000 copies of our *Vermilion Flycatcher* member magazine
- Reached over 4,200 people with our e-News bulletin each week
- Sold about 700 copies of our Revised 8th Edition of *Finding Birds in Southeast Arizona*
- AZ Important Bird Areas Program revised and published *A Guide to Enhancing Rivers, Streams and Desert Washes for Birds and Other Wildlife*
- Our website received 314,000 page views, with the Rare Bird Alert and Paton Center pages (both with about 26,000 each) leading the pack!
- Our Facebook page now has over 6,200 followers

Southeast Arizona Birding Festival

- 296 paid registered attendees from 27 states and 3 foreign countries
- 892 total number of attendees at the Nature Expo
- 36 total field trips led by 34 trip leaders
- 11 workshops and free talks

Field Trips

- 193 total field trips led by 48 field trip leaders
- 920 unique participants and 3202 total participants
- 1,492 participants on 52 weekly walks at Tucson Water's Sweetwater Wetlands

Volunteers

- 340 total volunteers
- 11,441.23 total volunteer hours representing \$ 276,191.29
- 109 Arizona Important Bird Areas volunteers, totaling 2,585 hours
- 44 Tucson Meet Your Birds volunteers
- 32 Nature Shop volunteers, totaling 2,712.45 hours

Tucson Meet Your Birds, Henry Johnson; Year of the Hummingbird; Birders enjoying Carr Canyon during the Southeast Arizona Birding Festival

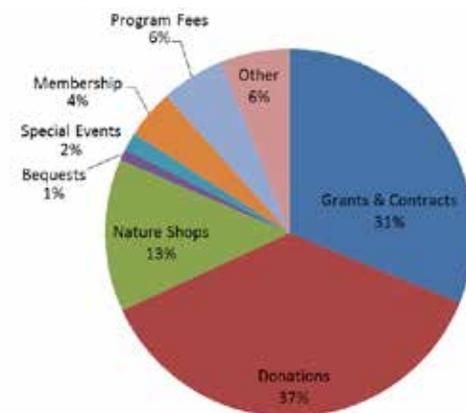


Tucson Audubon Society Income & Expenses Summary

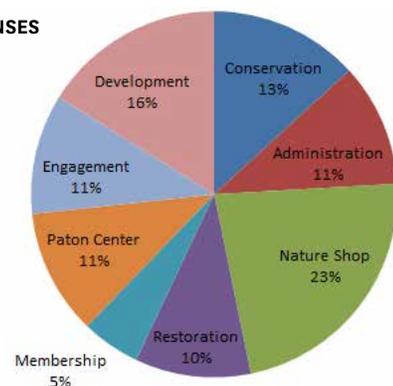
For the Year Ended December 31, 2017

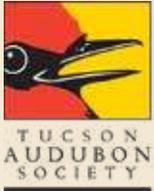
Income	\$2,415,085
Expenses	(\$2,210,589)
NET	\$204,496

INCOME



EXPENSES





BIRDS BENEFIT BUSINESS *Alliance*

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 you appreciate their support for us by supporting them.** Visit tucsonaudubon.org/alliance for more information, including links to member websites.

LEADING

Carl Zeiss Sports Optics
Circle Z Ranch
Focus HR
Historic Y
Riverpark Inn
Western National Parks Association

SUSTAINING

Crown Community Development-Arizona
Farmers Investment Company
Heartstone Retreat/La Cocina
Kimberlyn Drew Realtor
Leica Sport Optics
Swarovski Optik

SUPPORTING

Rockjumper Birding Tours
Solipaso Tours/El Pedregal Nature Lodge

CONTRIBUTING

Candlewood Suites Tucson
Diet of Hope Institute
Dr. Miguel A. Arenas, MD
Financial Architects/
KMS Financial Services Inc.
Mabel's on 4th Kitchen Boutique
Opticron USA
Quailway Cottage
Santa Fe Ranch Foundation
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Visit Tucson
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SMALL BUSINESS

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Borderland Tours
The Bird House
Desert Harrier

Birding Travel from our Business Partners

Rockjumper—Worldwide Birding Adventures

rockjumperbirding.com

INDONESIA—SULAWESI & HALMAHERA— WALLACEAN ENDEMIC 2018

Dates: September 1–14, 2018

Price: \$4771

Leader: Rich Lindie

Spaces Available: 4

Our birding tour comprehensively covers much of the region's available habitats, from the highland mountains and luxuriant lowland rainforest of Sulawesi to the Australasian influenced Halmahera in the Moluccan "Spice Islands," maximizing our chance to find the more than one hundred range-restricted bird species confined to this fabulous region.

ANGOLA—ENDEMIC OVERLAND BIRDING 2018

Dates: September 7–24, 2018

Price: \$6220

Leader: David Bishop & Gareth Robbins

Spaces Available: 5

Our overland safari is an "off-the-beaten-track" camping expedition for those with a sense of adventure and the willingness to journey where few birders have previously ventured! We will cover all the major habitats and birding sites of Angola as we seek out all of Angola's endemic and range-restricted birds.



Solipaso Tours solipaso.com

UGANDA BIRDS, SAFARI AND PRIMATES

Dates: July 20–August 4, 2018

Price: \$5950

Leader: David MacKay

We are excited to offer this birding safari to the "Pearl of Africa," which will include visits to Lake Mburo, Bwindi Impenetrable Forest, Queen Elizabeth National Park, Kibale National Park, and Murchison Falls National Park. All the while, on safari we have the chance to see big mammals in their habitat including gorillas, giraffes, elephants, lions, zebras, and more.



OAXACA BIRDS AND DAY OF THE DEAD

Dates: October 28–November 3, 2018

Price: \$2950

Leader: David MacKay

Spend a week exploring the valley of Oaxaca and the surrounding forested mountains, which are home to 12 endemics and many other tropical species. Some of the birds include Oaxaca and Bridled Sparrow, Ocelatted Thrasher, Dwarf and Slaty Vireo, White-throated Towhee, Red Warbler, and Chestnut-sided Shrike Vireo. We'll also visit several ruins and take time to experience the great traditions of the Day of the Dead.

ABOVE: Black-naped Oriole, Timothy Ng
LEFT: Bridled Sparrow, Francesco Veronesi

Global Big Day: Goal to Exceed State and County Highs

If you like to get out in the spring sunshine and count birds, you should sign up to participate in the annual Global Big Day (GBD) in Arizona (formerly North American Migration Count in Arizona) taking place on Saturday May 5. The GBD is coordinated in Arizona by Arizona Field Ornithologists and supported by local Audubon societies, local bird clubs, and other interested organizations. With hundreds of volunteers in the field we will strive to get a “snapshot” of the progress and character of spring migration, and most of all have fun! The 14-year high for the Arizona count is 303 reached in 2013 and 2014. This year, we have a goal of surpassing this previous

TheCornellLab
GLOBAL **BIG** DAY
5 MAY 2018



high and are urging every county to try to go over their previous highs. That is, we'll be adding an element of competition. It won't be a competition to see which county gets the greatest total, as the opportunities in each county are very different, but a competition to see if we can exceed previous highs statewide and in each county. The count is organized by county, and if you want to volunteer, check out the list of county coordinators at azfo.org. If you are in one of the counties that doesn't have a coordinator, please offer to coordinate our efforts there by contacting the State Global Big Day in Arizona Coordinator Doug Jenness at d_jenness@hotmail.com.

Southeast Arizona Rare Bird Highlights



Carolina Wren, Andrew Core

This Carolina Wren was found by Matt Brown on March 7, 2018 at Patagonia Lake State Park. Arizona has four accepted state records (and another submitted), if accepted this is a potential first for Santa Cruz County.



Streak-backed Oriole, Jeremy Medina

This Streak-backed Oriole was found by Linda Merrick “about a week prior” to January 22, 2018 in her yard in central Tucson. Casual visitor, mostly in fall and winter though it has bred. This is one of two known Streak-backed Orioles wintering in southeast Arizona this year.

THE TAS-ifieds—CLASSIFIED ADS

Got Birderhouses? If you need help buying or selling a home, call Kimberlyn! Tucson Audubon Business Member since 2006, helping clients across Tucson while giving back to our community. Kimberlyn Drew, MBA, Associate Broker, Long Realty Company, call/text 520-237-1408, Kimberlyn@KimberlynDrew.com, KimberlynDrew.com

Classified and display ads are accepted from individual members and members of our Birds Benefit Business Alliance. Visit tucsonaudubon.org/flycatcher for rates or contact Matt Griffiths at mgriffiths@tucsonaudubon.org to book an ad.

Ina Road Bridge Bats and

Janine Spencer-Glasson, Environmental Project Manager for the Town of Marana

History of Bats in Bridges

According to Bat Conservation International, over 50% of bat species are in severe decline or are already listed as endangered. The older bridge designs provided crevices for bats to roost; however, as these bridges are being replaced with new, flat-bottomed bridges, bat roosting habitat is being lost at an accelerating rate.

Ina Bridge

While the old Ina Road bridge provided an abundance of high quality crevice habitat, it became structurally unsound and was inadequate to handle traffic volumes. The old Ina Road Bridge had expansion joints and crevices that were used by thousands of bats, but the new design is flat-bottomed without the crevices. Many of the Mexican free-tailed bats migrate to this area during the summer. Some of these bats stay to over-winter under the Ina Road Bridge. As part of the environmental scoping process, Arizona Game and Fish (AZGFD) recommended mitigation by providing replacement habitat for the large bat population roosting in the bridge.



Mexican free-tailed bat, Arizona Game and Fish Department

Bats Using Ina Road Bridge

The Ina Road Bridge is one of many bridges in Tucson that provide significant roosts for bats. This bridge is home to about 15,000 thousand bats, mainly Mexican free-tailed bats (*Tadarida brasiliensis*) and some Cave myotis (*Myotis velifer*) during the summer. Approximately 5,000 Mexican free-tailed bats remain in the bridge in the winter. A large culvert adjacent to the Ina Road Bridge also provides roosting habitat for bats.



New bat boxes under the Ina bridge, Arizona Game and Fish Department

Because Tucson can get very hot during the summer and cold during the winter, it was important to design bat roosting habitat that is well-insulated in order to mimic, as closely as possible, the temperature moderation provided by the thermal mass of the bridge.

A thickened bridge deck was designed with cut-outs so that Modern Bat Boxes™ could be incorporated into the bridge deck mass to moderate temperatures for the bats. Modern Bat Boxes are designed and constructed in New Mexico, from a light-weight concrete material. Each bat box is 4 ft x 4 ft x 4ft, with a crevice varying from ¾ inch to 1 ½ inches in width.

AZGFD and Sandy Wolf gathered baseline information prior to demolition of the old bridge. They monitored bats under the Ina Bridge from May 2015 through April 2016.

AZGFD also installed data loggers that record temperature and humidity inside the crevices in the old Ina Road Bridge and in the bat boxes in the new bridge to determine whether the boxes have a microclimate that is similar to the old bridge crevices.

The Town of Marana made a presentation to the Regional Transportation Authority (RTA) Wildlife Linkages Working Group to request funding for the bat habitat replacement, and the RTA approved just over \$80,000 to fund incorporation of bat habitat into the new Ina Road Bridge and into an existing bridge at Cortaro Road just one mile north of the Ina Road Bridge.

Bat Boxes

Exclusion of Bats from Old Ina Road Bridge and Occupation of New Ina Bridge Bat Boxes

AZGFD coordinated with AZ Department of Transportation (ADOT) to exclude bats from the old bridge prior to demolition. The exclusion was timed during mid-October through December, when monitoring determined that bat numbers are low. AZGFD gradually sealed up unoccupied crevices and crevices when bats left for the evening to forage. They had to create plastic sheeting funnels hanging from some crevices so that the bats could exit but couldn't return to the same crevice. Then biologists could seal up the crevices. There were a few bats in torpor that still had not left the bridge after two weeks so AZGFD gently removed these bats physically and placed them in the new bat habitat incorporated into the new bridge section. The bats were sealed into the new bat habitat until the old bridge was demolished, at which time they were released.

As of January 27, 2018, AZGFD reported that two of the bat boxes in the new bridge section were inhabited by approximately 700 bats. AZGFD will be monitoring the bats in the new bridge for two years post-construction. Hopefully we will see more bats using their new bat habitat this summer as they return to Tucson for the summer.



Mexican free-tailed bats in the new boxes, Arizona Game and Fish Department

Acknowledgements:

Joel Diamond, Sr. Project Manager, Arizona Game and Fish Department
 Eduardo Moreno, Biologist, Arizona Game and Fish Department
 Regional Transportation Authority, Pima County, Arizona
 RD Wildlife Management, New Mexico
 Sandy Wolf, Bat Biologist

Bats are not the only urban wildlife you will find around Tucson! Here are some tips from Tucson Wildlife Center on living in harmony with our urban wildlife.

- You should only approach injured wildlife in extreme circumstances and wearing protection clothing. If you find an injured animal in your backyard, first bring all pets inside and then monitor the situation. Feel free to call Tucson Wildlife Center's 24/7 helpline 520-290-9453.
- Tucson Wildlife Center is the only center who will take injured bats. First of all, do not pick up the bat with your bare hands. Instead, carefully, scoop the bat up with a piece of cardboard into a box or use leather gloves to gently pick up the bat. Put it into a box with a lid and keep in a quiet, dark place to take to TWC.
- If you find a baby bird under a tree unharmed, first check to see if the parents are around and monitor the situation. If the baby has most of its feathers and it flutters its little wings in the presence of an adult, then they are fledging and the parents will feed it on the ground. If the baby cannot walk, only has fluff or no feathers, or its eyes aren't open, they should be placed back in the nest. Do not give food or water, as tempting as it may be. If the bird looks healthy and isn't cold, and you can see the nest and can reach it, try to re-nest it. If the nest is too high, you can try to make a nest as high as you can with an old plastic container. Cut small holes in the bottom of the container so if it rains the nest won't flood with water. Line the nest with grasses or a soft, dry washcloth with no strings coming off of it. Attach the nest to the tree or fence or whatever is near the original nest with wire, string, or bolts/screws. If it has a broken wing, leg, or otherwise looks injured call the Wildlife Help line.
- Wait until fall to trim your palm trees—many birds use them to nest in the spring!
- Cap your chimneys to prevent raccoons, squirrels, and birds from using them to build nests.
- Do not feed wildlife. Planting native plants is an excellent alternative to feeding wildlife.
- Avoid using poisons to eliminate pests. Animals further up the food chain, such as raptors and mammals, will also die if they eat poisoned rodents or other small animals.

Mickey the Mexican Free-tailed Bat

Karen Krebbs

I arrived early one morning at the Arizona-Sonora Desert Museum (ASDM) and walked to my office. I observed a bat on the concrete ramp behind my office. The bat was alive and very thin. There appeared to be no injuries and the bat was awake and alert. I set up a cage in my office and daily fed the bat mealworms. The Mexican free-tailed bat (*Tadarida brasiliensis*) was a male and I named him Mickey. Mickey responded well to the care and feedings. It took several weeks, and as Mickey gained weight I felt he was ready to rejoin the bats that were residing in the bat houses behind my office. I had installed the bat houses years ago and many Mexican free-tailed bats were living in the houses. Early one morning I arrived at work and took Mickey outside and near the bat houses. As I held Mickey, he began to call and bats inside the bat houses flew out of the houses. The bats began to circle around above me and I released Mickey. Mickey joined the other bats and they flew around for a few minutes and then went to the bats houses. The bats landed on the houses and crawled inside. Mickey had rejoined his friends!



Mickey the Mexican Free-tailed Bat, Karen Krebbs

A New Study Shows How Wildlife Feeding is Altering Bird and Animal Migration—and Spreading Disease

Birds and other wildlife migrate to avoid harsh winters and limited resources. However, migration provides another, less discussed, benefit: it weeds out parasitic infection from populations. Infected animals that undertake migration are less likely to reach their destinations, thus keeping parasitic and illness loads low in the overall population. As animals find new and more convenient food sources provided by people, either intentionally or unintentionally,

they are proving to be less inclined to migrate, and instead, establish resident populations. Thus, feeding wildlife is changing both animal populations and migration itself. The authors of this study raise several concerns: first, that resident populations are more likely to host parasites and other illnesses, second, that resident populations will outcompete migratory species, and third, that these more sedentary populations will actually lead to more virulent and stronger diseases. The authors suggest that people who feed wildlife should take steps to help avoid these problems. We can plant native plant species that have evolved with native birds and wildlife, and ensure that feeders and water dishes are kept clean to avoid disease.



Lazuli Buntings at a clean feeder, Jonathan Lutz

Here at Tucson Audubon, we highly encourage those two points. This is not meant to discourage people from hanging bird feeders, but to remind everyone that maintenance is a part of bird feeding. We all have the responsibility to conserve and protect the wildlife we enjoy watching. See tucsonaudubon.org/faq for tips on bird behavior and how to properly feed them.

Read the full article: University of Georgia. “Feeding wildlife can influence migration, spread of disease.” *ScienceDaily*, 13 March 2018. bit.ly/2G5JueW.

Arizona Legislative Session 2018: Tucson Audubon Society at Environmental Day

On February 7th, 2018, over 250 environmental activists gathered at Arizona's capitol building in Phoenix for the annual Environmental Day at the Capitol. Tucson Audubon members joined in the effort to discuss and advocate for environmental causes such as water quality and quantity, health and security, open space and public lands, and many more with our elected state legislators. The legislative session

always moves fast for those working at the Capitol and it is critical that we find time to raise the issues we care about as part of the democratic process. However, it is a day of learning as much as a day of sharing. One active Tucson Audubon member recounted his day spent at the Capitol and was generous enough to share his thoughts with us.

Earth is us. We are Earth.

**This is the profound message from several Arizona legislators.
Native Americans and Hispanic Americans.**

**They delivered their message to all of us attending Environmental Day at the Capitol in Phoenix.
That was first thing in the morning Wednesday, February 7, 2018.**

We are Earth. Earth is us.

**The rest of us would go on to lobby legislators for
"Keeping Public Lands Public," "Environmental Justice,"
"Ecological Water," and more.**

**250 strong, we conservationists stood tall in the Arizona House and the Arizona Senate Galleries,
with introductions on Environmental Day.**

That was good.

**But, alas, not all legislators on the floors, the Representatives and Senators,
know that Earth is us, and that we are Earth.**

**And, alas, for some Arizona legislators, our precious public lands are not precious,
but are only lands to be exploited for financial gain.**

That is what Tucson Audubon learned at the Capitol.

And the truth is: Earth is us. We are Earth.

—Robin W Goose, PhD, Tucson Audubon Member



Get Kids Outside and Birding!

People who spend time outside intuitively know it improves overall well-being. After a walk in nature, people often report feeling restored, peaceful, grounded, and connected. Now, scientists are beginning to find evidence that being in nature has a profound impact on our brains and our behavior, helping us to reduce anxiety and stress, increase our attention capacity, improve creativity, and enhance our ability to connect with other people. These findings on how nature improves our brains bring added legitimacy to the call for preserving natural spaces—both urban and wild—and for spending more time in nature in order to lead healthier, happier, and more creative lives.

Unfortunately, we live in a society where people spend more and more time indoors and online—especially children. As Richard Louv notes in his book *Last Child in the Woods*, our technology-addicted culture is making it harder for children to spend time outside. There are significant benefits for children who learn to appreciate nature at an early age. According to recent studies, spending time outside improves resilience to stress; reduces attention disorders, depression and anxiety; supports creativity and cognitive functioning; increases physical activity and thereby helps to reduce obesity; and develops respect and responsibility for our planet earth.

The Tucson Audubon Society Nature Shop makes it easy and fun to teach children about their environment, stimulate their curiosity, and help them understand the world around them. Make family night, or a rainy afternoon, fun with Earthopoly or the Desert Friends Wood Puzzle; build a volcano or go on a fossil dig with one of our science kits. Home sick from school? No need to watch TV all day. Why not read *Josefina Javelina* or *There's An Owl in My Shower* instead? Long car ride? *The Great Southwest Activity Book* provides hours of entertainment with crossword puzzles, word finds, mazes and more. Go fly a kite with one of our Birds of Prey kites. Come in and check out all the ways we can help you instill a love of nature in the next generation of environmental enthusiasts.

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–Saturday, 10 AM–4 PM
520-629-0510 ext. 7015
300 E University Blvd #120, Tucson 85705
(corner of University & 5th Ave.)

AGUA CALIENTE PARK SHOP

*Thursday: 9–1:30;
Friday and Saturday: 10–1:30
June: Thursdays only: 9–1:30
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 book store.



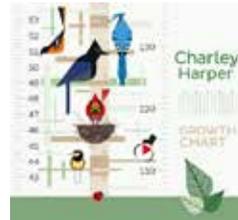
Audubon Birds \$9.95



Bug Bottle & Bug Book \$19.95



Celestron Nature DX 8x32
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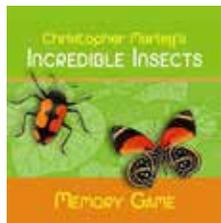
Charlie Harper Growth Chart
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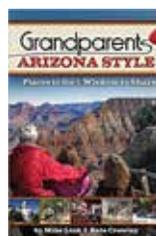
Incredible Insects Memory Game
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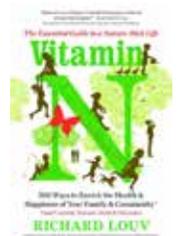
\$14.95



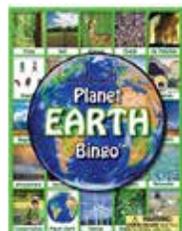
\$15.95



Paint a Birdhouse Kit \$14.95



\$15.95



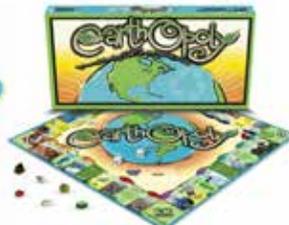
Planet Earth Bingo \$16.95



Scramble Squares Puzzles \$12.99



Sunday Afternoons
Kids' Hat \$26.00



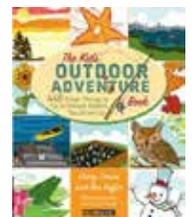
Earthopoly \$26.00



\$7.25



\$9.95



\$18.95

BOOK REVIEW

Neglected No More

A review by Rick Wright

Six decades after its admission to the Union, Hawaii looms larger on most birders' horizons than ever before. The fiftieth state has finally been "annexed" into the area covered by the American Birding Association, and that organization's 2018 bird of the year is the sickle-billed orange-scarlet honeycreeper known as the l'iwi. The islands' many severely imperiled bird species are increasingly the focus of conservation efforts, and ornithotourism is catching up, with more excursions offered every year.

In his new *Belonging on an Island*, the distinguished writer and historian Daniel Lewis offers a thorough and captivating introduction to the avifauna of his native state and how it has been affected by human settlers—and vice versa—over the millennia. The Dibner Senior Curator for the History of Science at the Huntington Library, Lewis tells a story richly informed by his readings of a wide range of sources published and unpublished, from the great illustrated monographs to the diaries and field notes of collectors and conservationists.

What could have become a vast jumble of anecdotes and observations is neatly organized here into four chapters, on principles both chronological and thematic.

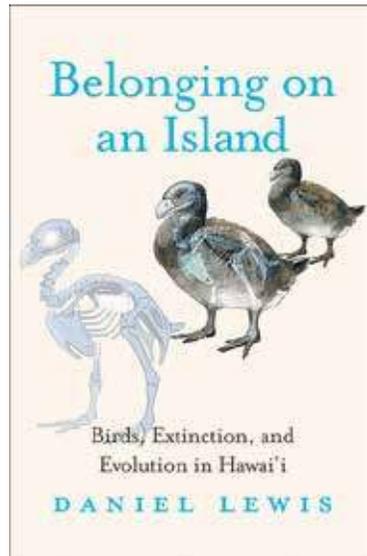
Lewis begins with a reminder that extinction is nothing new, and that human-induced extinction has been with us for as long as there have been humans. The story is told in part in a series of fascinating interviews with such famous ornithological paleontologists as Storrs Olson and Helen James. We learn that somewhere between one thousand and two thousands species of birds were exterminated by the activities of Polynesian islanders in the Paleolithic period—a figure equivalent to up to 20% of the number of species recognized today. Lest we be tempted to take solace in this fact, to consider human ravages of the landscape somehow "normal," Lewis reminds us that in comparison to the natural background rate of extinction, human-caused extirpation is a raging forest fire that must be fought.

"Counting Extinction," Lewis's chapter dedicated to the Kaua'i 'ō'ō, introduces us to the activities of the biologist John Sincock, who rediscovered the bird, already then thought to be extinct, in 1971. Sincock devoted much of his U.S. Fish and Wildlife Service career to monitoring the tiny population of the 'ō'ō, only to see this species, too, recede into the darkness of definitive extinction. Facing field conditions ranging from challenging to life-threatening, Sincock

documented the final decline of the bird and demonstrated its connection with the tenuous fortunes of the native 'ōhia' tree. Lewis goes on to show us how Sincock and other noted scientists such as Sheila Conant stand in a continuous tradition of scholarly work on the biology of the Hawaiian islands; much of the material presented here about Henry C. Palmer, George Munro, and even the well-known Henry Henshaw is entirely new, a treasure trove for anyone interested in the history of American ornithology (this is the same Henshaw who surveyed the birds of Arizona so successfully in the 1870s).

The critically endangered Palila (not incidentally, the middle name of the daughter to whom Lewis dedicates the book) provides the case study in conservation at the center of the third chapter. Diseases including bird pox and avian malaria spread by introduced mosquitoes have wrought havoc on bird populations in Hawaii, but the Palila, resident at higher, drier elevations not suitable for stinging pests, has been largely spared those scourges; introduced mammals and global warming now pose the greatest threat to this seedeater.

Hawaii has long been notorious as the host to an implausibly wide range of introduced species, animals and plants alike. Lewis's review of some of the more egregious cases leads him to what many readers will find the most interesting, and the most contentious, part of *Belonging on an Island*, a "new way of thinking about nativeness." He points out that some introduced species have actually provided benefit to native species, and the eradication of established non-natives can have unanticipated and entirely negative consequences. Most provocatively, Lewis urges us to think of ourselves, humans, as opportunistic, invasive, "introduced"—to see ourselves, in other words, as part of a nature that has never been pristine and untouched, not even in those paradisaic islands known as Hawaii.



Rick Wright leads Birds and Art tours for Victor Emanuel Nature Tours. He will be conducting field trips and workshops this summer at Southwest Wings, Boyce Thompson Arboretum, and the Southeast Arizona Birding Festival.

Belonging on an Island: Birds, Extinction, and Evolution in Hawai'i
Daniel Lewis
New Haven and London: Yale University Press, 2013
320 pages—hardcover; \$45.00



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Vermilion Flycatcher

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Southeast Arizona
BIRDING FESTIVAL PRESENTED BY ZEISS



The spectacular biodiversity of the Sonoran Desert and the Sky Island mountains comes alive during the summer monsoon rains.

AUGUST 8-12, 2018

Keynote speaker Bill Thompson III

Lifelong birder, author and co-publisher of *Bird Watcher's Digest*, Bill will also be leading a youth birding trip, a Big Sit at the Paton Center for Hummingbirds, and will clean your binoculars for you!

NEW! Overnight field trips to southeast Arizona's best birding sites

Half- and full-day trips, evening owling trips, workshops, and a FREE Nature Expo including talks, vendors and kids' activities



Registration NOW OPEN at tucsonaudubon.org/festival