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
520-629-0510 (voice) or 520-623-3476 (fax)
TUCSONAUDUBON.ORG

Board Officers & Directors
President—Les Corey Secretary—Deb Vath
Vice President—Mary Walker Treasurer—John Kennedy

Directors at Large
Matt Bailey, Richard Carlson, Edward Curley, Kimberlyn Drew, Dave Dunford, Tricia Gerrodette, Laurens Halsey, Kathy Jacobs, Cynthia Pruett, Nancy Young Wright

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Engagement—Deb Vath
Finance—John Kennedy
Nominating & Governance—Dave Dunford
Personnel—Matt Bailey
Resource Development—Kimberlyn Drew

Programs & Activities
Field Trips—Luke Safford
Library, Membership Meetings
520-629-0510 ext 0
Rare Bird Alert—Andrew Core | Report Rare Birds
520-629-0510 ext 3

Staff (unless otherwise stated, dial 629-0510 plus extension)
Interim Executive Director—Patti Caldwell ext 7001
Finance Director—Mark Krietemeyer ext 7014
Accountant—Kim Lopez ext 7003
Director of Conservation & Research—Jonathan Horst
520-971-6238 ext 7004
Bird Conservation Biologist—Jennie MacFarland
Conservation Advocate—Nicole Gillett ext 7010
Field Crew Supervisor—Rodd Lancaster
520-296-6909
Restoration Project Manager and K-12 Youth Engagement Coordinator—Andy Bennett 520-262-1314
Field Crew—Dan Lehman
Field Crew—Kari Hackney
Conservation Assistant—Olya Phillips
Paton Center Director—Jonathan Lutz 520-394-2340
Volunteer Coordinator—Luke Safford ext 7011
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Digital Media & Bird Conservation—Matthew Griffiths 520-971-7924
Retail Manager—Debbie Honan ext 7007
Operations & Retail Assistant—Kimberly Matsushima ext 7017

Tucson Audubon Nature Shops
300 E University Blvd #120
520-760-7881

Tucson Audubon Nature Shops
300 E University Blvd #120
520-760-7881

Tucson Audubon Nature Centers
Mason Center
3835 W Hardy Rd, Tucson, AZ 85742
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

Tucson Audubon Reaches All of Southeast Arizona

With the dissolution of the Huachuca Audubon Society at the end of 2016, Tucson Audubon is now the Audubon chapter for all of southeast Arizona and we are so excited to expand our family!

We need your help! Were you a Huachuca Audubon member? Do you live in Cochise, Santa Cruz, Graham or Greenlee County? Do you have family or friends in the area? Please help spread the word that Tucson Audubon is now the chapter for everyone in southeast Arizona. Please note, if you are a member of National Audubon, this does not automatically include you in Tucson Audubon and we are your local chapter! Help us grow our membership and join today at tucsonaudubon.org/join.

Tucson Audubon’s work in conservation, education and recreation helps people get outside to enjoy the birds and beauty of southeast Arizona. If you are a resident in our expanded area, what activities or actions would you like to see and how can we best serve you? Send us your ideas for what Tucson Audubon should look like across all of southeast Arizona.

Contact us at info@tucsonaudubon.org and sign up for e-news updates at tucsonaudubon.org/enews.

Welcome!
As Karen Fogas noted in her previous director’s commentary, change is challenging, and she acknowledged, familiar faces have moved on to new and different things. I’m writing to you today to share the news that Karen is now among those familiar faces who’ve moved on to new endeavors. Tucson Audubon can boast many fine accomplishments that occurred during Karen’s tenure. We wish her well as she pursues new professional opportunities.

During this transition period, I pledge that Tucson Audubon will maintain a strong advocacy voice and continue to be a leader in addressing the most critical issues as they relate to birds and habitat. We are committed to increasing membership outreach and recruiting efforts, as well as enhancing our popular citizen scientist engagement projects including Arizona’s Important Bird Areas Program and the Tucson Bird Count. The Paton Center for Hummingbirds, which received nearly 14,000 unique daily visits in 2017, will continue to be a focal point for public programs related to the appreciation of birds and the benefits of healthy habitats, which in turn bolsters our expanding Habitat At Home program.

I’m excited to announce that the 2018 Southeast Arizona Birding Festival will be held in a new venue and feature some spectacular new field trip options (more details occur later in this issue). Tucson Audubon’s popular slate of free field trips—a staple for our organization and a critical link to the recreational birding world—will also continue to strengthen this year. We’ve gained a remarkable amount of momentum from our annual gala event, Fly. We are looking forward to next year’s party that promises to be more entertaining than ever, and I can assure you it supports a worthy cause.

I speak for the entire Board of Directors when I say how grateful we are for your continued financial support. Your confidence in Tucson Audubon to identify and address an increasing number of threats to birds and our environment is deeply appreciated. Your loyal support enables our team of professionals and volunteers to pursue the Tucson Audubon mission unhindered; your friendship, which takes so many forms, reassures us that we are on course as a regional leader in bird conservation. We look forward to thanking you for your support, celebrating our successes with you, and fielding your concerns in the coming year.

You may be wondering what the next steps for the organization will be, as we search for a new professional leader. The Board of Directors has appointed Patti Caldwell, an experienced non-profit executive having served several Tucson organizations, as Interim Executive Director to lead Tucson Audubon while a formal search is launched for a permanent Executive Director. I’m happy to report that Board Vice President, Mary Walker, will Chair the Search Committee. We encourage recommendations from our members for potential candidates, as well as your suggestions for how to make our process most successful.

In her last statement to the membership, Karen noted, With every change comes opportunity. I hope you will join me in embracing the opportunities that await Tucson Audubon in 2018. Your support, as always, is deeply appreciated.

Les Corey, Board President

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
- 10% discount in our Nature Shops
- Vermillion Flycatcher news magazine
- Discounts on Tucson Audubon classes and events

All funds are used for local conservation efforts
Feel free to join using the attached envelope*
You may also sign up at tucsonaudubon.com/join or call our Membership Coordinator 520-209-1802

*Please note: Not all magazines may contain an envelope.
Field Trips  Luke Safford, Field Trip Coordinator

One of the great things about birding is the surprise factor—you never know what will be around the next bend in the trail. Our field trips this past year have proven this when a Streak-backed Oriole appeared in January at Arivaca Cienega, a Hooded Warbler flitted in the brush along Rock Corral Canyon, and an American Bittern flushed from our feet at Sweetwater Wetlands. While we hope for these moments, our leaders are prepared for them. In 2017 our 48 field trip leaders spent countless hours scouting, listening, checking eBird, and planning for you to join them for one of our 193 birding adventures around southeast Arizona. Remember, these guides are volunteering their time because they love birds and they love engaging our community of birders. Next time you see one of them, show your gratefulness, thank them for their time, and keep your eyes peeled for what may be waiting for you around the bend!

Upcoming Field Trips

Sweetwater Wetlands, every Wednesday, (8am in January & February; 7am starting in March)—Come join us as we explore the wilds of Sweetwater Wetlands on a weekly basis. This is a great time of year to see waterfowl, including some beautiful Wood Ducks. The Bobcat has been a recent star of the show as well!

Mason Center/Arthur Pack Park, every Saturday in January & February—We’ll start with feeder watching at the Tucson Audubon Mason Center followed by a stroll through Arthur Pack Park for some 20 to 30 more species along the trails with views of the golf course pond. Walks will also continue in March–May.

Sabino Canyon, 1st Saturdays of the month—Led by Sabino Canyon Volunteer Naturalists, Jean and Mark Hengesbaugh, we’ll bird Sabino Canyon Recreation Area walking a loop that includes both Sonoran desert upland and Sabino Creek riparian areas. Register online.

Tucson Botanical Gardens, 2nd Tuesdays of the month—This walk is especially good for beginning bird watchers and those interested in attracting birds to their own yards. Along the way we’ll point out some of the many bird-friendly plants at the gardens and give ideas for how to bring birds into your own yard.

Florence Farmlands, Thursday, February 15—We will drive Arizona Farms Road for likely Burrowing Owls and possible Ferruginous Hawks. The farmlands can seem an unlikely area for birding, but can be quite productive, including sparrows, raptors, and more. Register online.

Reid Park Ramble, Tuesday, February 20—A Tucson Audubon favorite led by field trip leader extraordinaire, John Higgins. We will meander around the park for about two hours looking for wintering waterfowl, raptors, woodpeckers, and surprises. Register online.

Tubac De Anza Trail, Sunday, March 4—It is early Common Black-Hawk time and we will keep an eye to the sky while looking for early migrants along the river. This trail has been a fantastic hotspot for winter and spring birds the past few years. Register online.

Madera Canyon, Saturday, April 28—Famous for hummingbird viewing, Madera Canyon offers a wide variety of birding habitats and life zones from the desert to the mountains. Join Clifford Cathers for an exciting morning of birding. Register online.

To register, for more info, and to see more field trips, visit tucsonaudubon.org/fieldtrips.
Register Now for Spring Birding and Outdoor Recreation Classes

Our adult education classes and workshops are designed for you to improve your knowledge and practice your skills in some of the most beautiful locations in the region!

NEW! WILDERNESS SURVIVAL CLASS with Vincent Pinto
March 1
Cost: Members $35, Nonmembers $45. Limit: 20 participants
(for individuals and families with children ages 14 and up)
Arizona is renowned for harsh environments that can overwhelm even the most experienced outdoor person. What if you got lost? Injured? Had to spend a night or multiple days in the wilderness? If you would like to be empowered with the knowledge to face any of the challenges that nature may throw your way, then join longtime Wilderness Survival Instructor Vincent Pinto for this fun, innovative, and informative in-class session. Registration in the accompanying “Wilderness Survival Field Experience” is highly encouraged to apply your newfound skills, but not required.

NEW! WILDERNESS SURVIVAL FIELD EXPERIENCE with Vincent Pinto
March 3
Cost: Members $65, Nonmembers $75. Limit: 20 participants
This is the field portion of the “Wilderness Survival Class” that will take place at the remote and beautiful 42-acre Raven’s Nest Nature Sanctuary near Patagonia Lake State Park. There you will learn a variety of hands-on survival skills, using only materials gleaned directly from nature. This empowering workshop covers a number of key wilderness survival priorities that will include: shelter-making, fire-making, water finding & purification, wild edible plants, wild medicinal plants, wilderness tools, natural navigation, and more! Organic, homemade lunch and dinner at Raven’s Nest Sanctuary are available for purchase.

NEW! URBAN BIRDING FOR YOUNG PROFESSIONALS with Homer Hansen
March 24
Cost: Members $45, Nonmembers $55. Limited to 10
Birdwatching has experienced a rebirth in popularity among those in their 20’s and 30’s over the last several years. If you have been thinking about trying birding for the first time, but have held out for fear of being the only one in your age group to join the party here at Tucson Audubon, fear no more. We have tossed out the slideshow lecture on birds and we are just going to get right down to it in the field on Mt. Lemmon. No birding gear? No problem! We have created a discounted, intro “urban birding kit” at our Nature Shop with binoculars, pocket bird guide, and larger reference field guide for about $150 (no tax).

NEW! THE LIFE OF THE HUMMINGBIRD with Stephen Vaughan
April 26 & 28
Cost $85 members $100 non-members. Limited to 15.
Have you ever wanted to know more about our beautiful hummingbirds and how they came to exist? Well now is your chance! Ornithologist, Steve Vaughn will take you on a learning journey to explore the life history of the hummingbird. This workshop is a 2-part series that will include an in-class presentation and a field trip to the Paton Center for the Hummingbirds where the sought after Violet-Crowned Hummingbird can be seen year-round!

Upcoming SIGN UP SOON, THESE CLASSES ARE ALMOST FULL!

BASIC ANIMAL TRACKING FIELD CLASS with KEVIN HANSEN — MARCH 10
Cost $35 members, $45 non-members. Limited to 12 participants ages 12 and up

BIRDING BY EAR with HOMER HANSEN — APRIL 12 & 14
Cost $110 for members and $145 for non-members. Limited to 10.

See tucsonaudubon.org/education for details and to register.
Questions? Email lgaines@tucsonaudubon.org or call/text 520-488-2868.
TUCSON MEET YOUR BIRDS

SATURDAY, MARCH 3, 2018 · TIME: 7 AM–NOON

Meet your birds at Sweetwater Wetlands, where 309 bird species have been seen!

We’ll make it easy for you! Stroll 20 acres of tree-lined paths and ponds with bird experts pointing out the birds for you. Come learn about birds and what Tucson Audubon can do for you and our birds.

tucsonaudubon.org/TucsonMeetYourBirds

- No expertise or binoculars needed, we’ll loan them to you!
- Activities for families and children
- Wheelchair accessible paths
- Fun partner vendors
- Bring a non-birder!

FREE!
Living with Nature Monthly Program

Free monthly programs to entertain, inform and educate. Speakers present topics related to bird biology and ecology, global and regional birding hot spots, and conservation issues that affect birds and their habitats. Program locations in Tucson, Green Valley and Oro Valley. Bookmark tucsonaudubon.org/lwn for more details. Do you have ideas for Living with Nature topics and speakers? Contact Katie Brown, at kbrown@tucsonaudubon.org or call 520-629-0510 x 7012.

TUCSON
6:30–8 pm, REI Tucson
160 W Wetmore Road, Tucson, AZ 85705
Save a seat(s) and get a reminder by registering at REI’s website, rei.com/events

January 18, Thursday
Urban Wildlife Rehabilitation
As people move into uninhabited places wildlife loses habitat. Wildlife is forced to find a new home, one that is not already claimed by predators and this may create an increase in conflicts with humans and animals. Join this Living with Nature program presented by Tucson Wildlife Center’s development & community relations director, Robin Motzer, as we share harmonious coexist tips and stories, including how to rescue injured, ill or orphaned wildlife; desert wildlife facts and frequently asked questions; and ‘Humans are animals too’. Live animals are not included in this presentation.

February 12, Monday
Arizona Climate: Past, Present, and Future
This presentation will explore historical patterns and mechanisms driving climate variability across Arizona and how they may be impacted in a changing climate. Dr. Mike Crimmins is on the faculty in the Department of Soil, Water, and Environmental Science at the University of Arizona and is a Climate Science Extension Specialist for Arizona Cooperative Extension. Major changes in the global climate system have been observed in recent decades that have directly impacted Arizona’s complex climate, such as long-term cycles in Pacific Ocean temperatures that can impact storm tracks across Arizona, bringing multi-year wet periods and long-term droughts.

ORO VALLEY
Saturdays, 12–1 pm
WNPA Western National Parks Association
12880 N Vistoso Village Dr

January 20
What to do when you encounter wildlife
Tips, facts and safety on living with wildlife with Robin Motzer, Development/Community Relations for Tucson Wildlife Center, Inc. Sometimes people don’t always know the best approach to dealing with animals, and other times misinformation is to blame. Learn tips on taking a diplomatic, friendly approach to educating your neighbors who may not know the best approach to harmoniously live with wildlife, and how to make them more receptive to changing their behavior. Her talk includes: How to rescue injured, ill or orphaned wildlife; desert wildlife facts and frequently asked questions; and humans are animals, too.

February 17
The Exciting Night Life of Bats
Presented by Karen Krebbs, we will learn about an amazing and unique nocturnal mammal and how it has become so successful as a predator and a pollinator.

March 17
How to Identify Birds of Prey
Here is an opportunity to learn some simple characteristics to help you identify birds of prey. Steve Vaughan is a professional photographer and ornithologist who has put together some formulas to guide you through this process. This program will be followed by a field trip to the Tubac Hawk watch on Sunday, March 18. To join field trip contact Steve at 719-649-8741.

GREEN VALLEY
Saturdays, 10–11 am. November–April
Green Valley Recreation Desert Hills Center
2980 S Camino Del Sol, Green Valley, AZ 85622

February 3
Counting Cuckoos – Three Years of Searching the Sky Islands
Join Tucson Audubon’s bird conservation biologist, Jennie Macfarland, as she talks about her experiences and discusses new data gathered by Tucson Audubon’s team of staff and volunteer surveyors who have also hunkered down motionless in dense foliage to spot the Western Yellow-billed Cuckoo.

March 10
Sergio Avila-Villagas

EVENTS CALENDAR

January 18: Living With Nature (Tucson)
January 20: Living With Nature (Oro Valley)
February 1: Sparrow Workshop
February 3: Living With Nature (Green Valley)
February 8: Raptor Workshop
February 12: Living With Nature (Tucson)
February 17: Living With Nature (Oro Valley)
March 1: Wilderness Survival Class
March 3: Tucson Meet Your Birds
March 3: Wilderness Survival Field Class
March 10: Animal Tracking Class
March 10: Living With Nature (Green Valley)
March 12: Living With Nature (Tucson)
March 17: Living With Nature (Oro Valley)
March 24: Urban Birding Class
April 7: Spring Wing Fling
April 7: Birdathon starts
Start Planning Now for the
8TH ANNUAL SOUTHEAST ARIZONA BIRDING FESTIVAL!
AUGUST 8–12
Registration opens on February 1st
Whether your birding list is 70 or 700, don’t miss southeast Arizona’s Sonoran Desert monsoon specialties!

TUCSONAUDUBON.ORG/FESTIVAL

NEW VENUE: DoubleTree by Hilton Hotel at Reid Park

NEW OVERNIGHT FIELD TRIPS: Overnight outings to exciting new places like the Chiricahua Mountains and beautiful lodging locations including Casa de San Pedro, Portal Peak Lodge, Ramsey Canyon Inn, Santa Rita Lodge, Amado Territory Inn, and the Stage Stop Inn. These field trips will be led by professional tour guides and are a unique opportunity to experience the wonder of Southeast Arizona birding.

KEYNOTE SPEAKER: Bill Thompson III

Bill Thompson III is the editor of Bird Watcher’s Digest by day. He’s also a keen birder, the author of many books, a dad, a field trip leader, an ecotourism consultant, a guitar player, the host of the “This Birding Life” podcast, a regular speaker/performer on the birding festival circuit, a gentleman farmer, and a fun guy to be around. His North American life list is somewhere between 673 and 675. His favorite bird is the Red-headed Woodpecker. His “spark bird” was a Snowy Owl. He has watched birds in 25 countries and 44 states. But his favorite place to watch birds is on the 80-acre farm he shares with his wife, artist/writer Julie Zickefoose. Some kind person once called Bill “The Pied Piper of Birding” and he has been trying to live up to that moniker ever since.
**Birdathon 2018 | April 7–May 7**

Sporting birders spotting birds in support of Tucson Audubon... that’s the essence of Birdathon, a southeast Arizona tradition since 1987!

**What is Birdathon and how do I participate?**
- Like a walk-a-thon, but instead of walking, go birding and gather pledges per species seen!
- Fun for everyone—kids, adults, beginners, and experts!
- Hold your Birdathon any time from April 7–May 7; your day can last from 1 hour to 24
- Join a team or lead one! Gather a group of friends and go find birds for a fun, different activity
- Prizes will be awarded for a variety of categories including: a grand prize, most species seen, most funds raised, and youngest birder
- Stay tuned for details and fundraising tips in our weekly emails and on our website: [tucsonaudubon.org/birdathon](http://tucsonaudubon.org/birdathon)

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**Spring Wing Fling**

Spring Membership Gathering  
Saturday, April 7th, 7:00 –11:30 am  
Location: TBD

Join us for fun, springtime birding:
- Guided, morning bird walks—Every hour, on the hour, from 7 to 10 am!
- Coffee and snacks
- Information about this year’s Birdathon
- And more!

Just bring your binoculars and your excitement!
Reflecting on the Fight for the Arctic National Wildlife Refuge

It was the end of a hot August day in Sierra Vista, and I was two hours deep in a meandering conversation with longtime resident Ron. We traded stories in an easy summer evening manner—chatting about dirt bikes, rural towns, our shared love of the mountains framing Sierra Vista to the north and south—and when he found out I worked for the National Audubon Society, Ron gestured to his worn camo ball cap and smiled, “I love ducks.”

As it turned out, Ron had made several hunting trips in Alaska, including a trip to the iconic Arctic National Wildlife Refuge. His recounting of the trip wove together his love for the scenic areas surrounding Sierra Vista where he hunted to the trips he had made up north, the “the last wilderness” of Alaska that he felt lucky to have been able to see. Ron told me although his grandson and daughter had moved to Washington state, he hoped to have the chance to take his grandson to the many places that had inspired him growing up.

President Trump signed a tax bill into law on December 22nd, 2017 that included a provision to open the Arctic National Wildlife Refuge to oil and gas drilling. Arizona Senators John McCain and Jeff Flake, and Representatives Martha McSally, Paul Gosar, David Schweikert, and Andy Biggs voted to open the Arctic Refuge to drilling despite widespread bipartisan condemnation by the American public, including their local constituents, who see the Arctic Refuge as a national treasure worthy of our protection and support.

The National Audubon Society is committed to staying in the fight to protect the Arctic Refuge, as this is the beginning of a longer process. The long summer evening I spent talking to Ron has been coming back to me these days; trading a precious and protected refuge for shaky and speculative budget estimates is hardly a fair deal, but politics is a long game. We have an Arctic Refuge to defend today because of sixty years of dedicated advocacy by Audubon– our fight today is a testimony to our past successes. Those battles are never in vain, even in the face of apparent loss, because the world we live in was never inevitable: it was made possible by the dedicated and hard work of people like you and me who shifted the course of things. It takes every phone call, handwritten letter, and office visit, again and again, to be a force for the values Audubon members believe in and to give those values form and function in our everyday lives.

As the end of the night neared, Ron turned towards me and spoke in low, conspiratorial tones. “I don’t need to hunt these days.” A pause stretched the minute between our barstools. “I go so I can watch the ducks. I just like being out there to watch them.”

Birds are indicator species; they tell us much about the natural world. But they are also, for many people, spiritual and personal: messengers, omens, harbingers. They remain resilient and adaptable to challenges, and they are excellent guides for social change; may we take their lead and be as spirited and tenacious for the work that continues ahead.

Maddox Wolfe is a field organizer for the National Audubon Society, and lives and works in Tucson, Arizona. Thanks to the generosity of Tucson Audubon Society, she works out of the Mason Center. She has a Master’s degree in Social Justice and Community Organizing.
Curve-billed Thrashers, Green-tailed Towhees, and Violet-crowned Hummingbirds—winter is an ideal time to view a variety of seasonal and resident birds at the Paton Center for Hummingbirds. The season requires more patience and quiet observation, but finding 30 species (or more) on the 1.4-acre Paton property is a real possibility. Parsing through a sea of sparrows will reveal White-crowned, Lincoln’s, and the occasional rarities, such as the Golden-crowned Sparrow we recorded in December 2016. Gambel’s Quail are always fun to observe, and it’s a great time of year to indulge in doves: Mourning, White-winged, and Inca being the most common representatives.

Less common in winter are butterflies, though it’s still possible see a butterfly at the Paton Center in all 12 months of the year. Butterfly-seekers should plan to visit on warm sunny days. A Mourning Cloak or a Pipevine Swallowtail butterfly may reward you for your efforts. The Paton Center’s gardens, including the Richard Grand Memorial Meadow, are mostly dormant during the winter months, so it’s best to look for green plants and leftover blooms from the past growing season. More than 50 species of butterflies were recorded at the Paton Center in 2017.

2018 will be the first full year guests will enjoy the completed revitalization of the Paton Center’s backyard viewing area. The space features a wheelchair-friendly ground plane, extensive new landscaping, a proven bird-attracting water feature, and a permanent viewing shelter. The latter is a design marvel that simultaneously inspires awe and blends perfectly into the surrounding landscape. The Tucson Audubon Society is grateful for the funding that made this project a reality—a generous gift from Marilyn Johnson and Ralph Van Dusseldorp, and grant funding from ArtPlace America.

Tucson Audubon Society is committed to the long-term success of the Paton Center for Hummingbirds. The property was visited by nearly 15,000 visitors in 2017, representing all 50 states and 17 foreign countries. The Paton Center affords the organization an opportunity to interface with casual visitors, beginning birders, photographers, tour leaders and participants, birders in pursuit of a Big Year, and many others. The continued support of Tucson Audubon Society members and friends will ensure that the Paton Center continues to grow and improve as a haven birds, butterflies, and people alike. In 2018, you can support this effort in a variety of ways, including:

- Following the Paton Center on Facebook, or writing a review of the property on Google.
- Becoming a Paton Center volunteer, assisting with visitor engagement, gardening, or special projects.
- Making a contribution to the Sugar Fund, either during your next visit or online.
- Engaging with the Paton Center’s ongoing capital campaign—A Homeplace for Hummingbirds—and securing the legacies of Wally and Marion Paton with a new, eco-friendly replacement for the original homestead.

It won’t be long before we’re shifting into spring migration mode, welcoming Lazuli Buntings, Black-headed Grosbeaks, and Rufous Hummingbirds. Until then, consider visiting the Paton Center and enjoying the quiet winter months. The bird and butterfly activity may be more subtle this time of year, but there’s still beauty to be found in this quaint backyard habitat in Patagonia.
VOLUNTEER Spotlight

We cannot say enough to show our gratefulness to our volunteers. You are the lifeblood of our organization and truly affect change in every corner of Tucson Audubon from conservation to engagement to advocacy, you are there and you are making a difference. The final numbers are not in yet, but in 2017:

334 individuals volunteered at least 1 hour
62 individuals volunteered at least 50 hours
32 individuals volunteered at least 100 hours
Total of 10,432 recorded volunteer hours
1 individual volunteered over 500 hours

After all volunteer hours are recorded for 2017 I suspect we will have doubled our recorded hours in 2016 and that is because of your dedication and commitment to our mission. So thank you. Be looking soon for an invitation to join us for a Thank You BBQ at Ft. Lowell Park on Saturday, January 27th, 11 a.m.

Recent elementary field trips to Sweetwater Wetlands have been a big hit for students, teachers, and volunteers. Here, Ken Kingsley and students look at a saguaro boot used by Gilded Flickers for nesting. Photo by Joanna Strohn

Our “Living with Nature” series kicked off in September when Katie Fallon shared her love of vultures with us. Callie Jordan and numerous volunteers have helped this year with monthly programs in Tucson and Green Valley. Photo by Joanna Strohn

The fall plant sale was a huge success and the Nature Shop was super busy. Franni Tourtellot, a regular Saturday Nature Shop volunteer, posed with the plants and graciously served our customers all Saturday morning.

Restoration and birding went hand in hand when eight volunteers gathered to pull up invasive weeds around the Columbus Weed Patch. Be on the lookout for more field trip/restoration volunteer opportunities.

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

FREQUENT FLYERS

GIFTS IN HONOR/MEMORY
In honor of Roger Barthelson from Roger Barthelson
In honor of Katharine Beale from Kate Beale
In memory of Pearl Parnigoni from Tammy Bose
In honor of Charles Bush from Charles Bush
In honor of Canny Clark from Susan Clark
In honor of Timothy Demers from Deirdre Demers
In honor of Barbara Dickson from Barbara Dickson
In memory of Nancy Mahaney Tuhey from Sib Ellis
In honor of Nancy Farina from Nancy Farina
In memory of Georgia Brauer from Holly & Matthew Finstrom
In honor of David Gardner from Leslie & David Gardner
In honor of Elizabeth Gricus from Elizabeth Gricus
In honor of Julia Gordon from the Windibrow Foundation
In honor of Lesley Wade from Brandon Herman
In memory of Pat Hodgson from Sayre Hodgson
In honor of Sylvia VanGundy from Elizabeth Hoffman
To Oly Kye from Zoe Holmes
In honor of Alice and Bill Roe from Suzie & Todd Horst
In honor of Thomas Huels from Thomas Huels
In honor of Susan Hunt from Susan Hunt
In memory of Ronnie Sidner from Karen Krebbs
In memory of Ruth Hileman from Karen & Gilbert Matsushima
In honor of William Mitchell from Pat Lumpkin & Bill Mitchell
In honor of Kimberlyn Drew from Nancy Moore
In honor of Brian Nicholas from Brian Nicholas
In honor of Rick Unklesbay from Margaret Norem & Rick Unklesbay
In honor of Joy Perry from Joy Perry
In honor of Sharon Pratt from Sharon & Mike Pratt
In honor of Mabel Quinio from Mabel Quinio & Bill Hildebrandt
In honor of Barbara Retzlaff from Barbara Retzlaff
In honor of Lynda Smith from Lynda Smith
In honor of Jane Tobin from Jane Tobin
To Elinor Michel from Charlotte Ann Tousley
In memory of Raymond Ukura from Butch Ukura
To Dortha Brown from Peggy Vale
In honor of Pamela Youngberg from Pam Youngberg
In honor of Kimberlyn Drew
In memory of Richard Flower
Arizona is famous among the birding community for its staggering diversity of bird species and breathtaking landscapes. This region is also visited by many bird enthusiasts to see high-profile star species such as Elegant Trogons and Montezuma Quail. Arizona is also home to species that are well known for their imperiled status and resulting high profile conservation actions such as California Condor and Mexican Spotted Owl. Both of these birds are included in the Endangered Species Act which explains why their conservation need is so well known to so many birders and nature enthusiasts in general. Arizona also provides vital habitat for several other bird species that are of high level conservation status whose imperiled state is not widely known.

Chestnut-collared Longspurs are a charismatic grassland bird that has declined by more than 87% since 1966 and is expected to continue to decline into the future. This species has been listed as Near Threatened since 2004 on the International Union for Conservation of Nature (IUCN) Red List and this year was elevated to Vulnerable status which is one step below Endangered. Chestnut-collared Longspurs nest in the Great Plains in north central US and winter in short grass prairie and desert grassland in the American Southwest and in north-central Mexico. The species’ dramatic decline is largely due to habitat loss both on its breeding grounds and wintering grounds. Much of the prairie it needs to nest has been converted to croplands and urban areas or has been otherwise fragmented making what habitat remains less suitable. Its wintering areas have also deteriorated, especially in Mexico where many formerly suitable wintering grassland areas have been converted to irrigated agriculture. One result of this distressing population decline is that this species is a Global Important Bird Area (IBA) qualifying species and two IBAs in Arizona have been designated as having Global significance as wintering areas for Chestnut-collared Longspurs. Both the San Rafael Grasslands IBA and Las Cienegas NCA IBA are popular birding areas in the winter and Global IBAs due to the relatively large flocks of Chestnut-collared Longspurs that spend the winter in these grassland areas. It was Tucson Audubon volunteers that documented these wintering flocks through the Important Bird Areas citizen science surveys and we continue to monitor these birds annually due to their very high conservation status.

Many birders get their lifer LeConte’s Thrasher at the famous “Thrasher Spot” near Buckeye west of Phoenix. This elusive and shy bird is relatively easy to find at this location which may give the impression that they are not particularly rare or imperiled. This desert specialist lives mainly in remote and desolate desert habitats and its presence in Organ Pipe NM and Cabeza Prieta NWR is the main reason both of these areas were included in the Sonoran Desert Borderlands IBA. The LeConte’s Thrasher is a Partners in Flight Red List Watch Species due to an alarming 67% decline since 1970. The large and under-birded Sonoran Desert Borderlands IBA provides important year-round habitat for these thrashers that nest during late winter through spring. Interestingly this species occurs mostly in desert scrub habitat with sandy or alkali flats with scattered saltbush and cactus where the bird’s pale plumage blends in beautifully with the desert soil. The vast majority of their desert habitat occurs on public land with the Bureau of Land Management having 44% of the LeConte’s Thrashers within their management area. Their declining population is largely due to habitat degradation and loss caused by conversion to agriculture, urbanization and livestock overgrazing. This spring Tucson Audubon will lead a citizen science expedition into the Sonoran Desert Borderlands IBA to gather more information on how many of these desert dwelling birds use this Important Bird Area.

Tucson Audubon is surveying for Chestnut-collared Longspurs this winter on the following dates. If you are interested in helping please visit aziba.org for information on how to sign up.

Las Cienegas NCA Global IBA – January 9 and January 31
San Rafael Grasslands Global IBA – January 11 and February 2
This month’s column turns our attention to one of the more familiar species found in southeast Arizona, the Curve-billed Thrasher. It was long been known that there are a couple of distinct populations of Curve-billed Thrasher in the United States with both occurring in Arizona. These sort into two subspecies groups. The first of these groups, *palmeri*, is found in the Sonoran desert. The more widespread Chihuahuan desert group, *curvirostre*, comprises a complex of two or three subspecies occurring in extreme southeast Arizona and down into northern parts of Mexico, generally at higher elevations than *palmeri*. The taxonomy of these two groups remains unsettled, and as many as six subspecies have been described. Recent genetic and morphometric studies have not universally supported some of these, reducing valid subspecies to as few as two. For our purposes, it is best to think of them as two distinct groups.

Telling these two groups apart can be difficult, but in the fall and winter when they are freshly molted, the subtle plumage differences become more apparent. Chihuahuan desert birds have more distinct whitish wingbars, more extensive, contrasting whitish tail tips, and a paler ground color to the underparts so that their dark chest spotting is more prominent. Vocally, calls of the two forms differ subtly too. The commonly heard call in the Sonoran region is a two or three noted call with the first note distinctly lower in pitch than the second (and third) notes. Birds found to the east of Arizona give two or three noted calls of equal pitch. In the Chihuahuan desert regions of southeast Arizona, Curve-bills generally give odd three noted calls, where the middle note is lower in pitch. When shortened to two notes, the call is usually high-low, unlike the low-high call of *palmeri*. While these Curve-billed Thrashers are sometimes treated as belonging to the *curvirostre* group, such birds more likely represent some genetic mixing between *palmeri* and *curvirostre* populations.

It was long been held that the majority of Curve-billed Thrashers found nearer to Tucson in Pima and Santa Cruz counties belong to the Sonoran subspecies *palmeri*. However recent attention focused on photos and sound recordings has called into question this belief. Birds showing intermediate characteristics or characteristics of eastern *curvirostre* have been photographed in Santa Cruz county (e.g. Patagonia). Reviewers for eBird have recently taken to reexamining the status of these two forms in southeast Arizona in the hopes of clarifying the status. This presents a great opportunity for citizen science to step in and help clarify the situation throughout southeast Arizona. If you are an eBird user, submissions of Curve-billed Thrasher images showing wing coverts, undertail pattern, and underparts patterning clearly, as well as audio recordings of whit-wheet type calls would be of great value. I suspect some interesting patterns may emerge. With a larger data set at hand, a clearer picture of the status of these two forms will hopefully become apparent.

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

Thank you to all our guests, gala sponsors, artists and participants.
You helped celebrate our Year of the Hummingbird in glittering style!


October 20, 2017
Loews Ventana Canyon

Clockwise from top left: Julia Rowe and Susan Atkisson; Marcia Obara, Paul Suchanek and Deanna MacPhail; Raptor fly-over prepares; Guests enjoy art-inspired auction; Dave Fitzsimmons, master of ceremonies.

Photo credits: Kris Eaton, Jennie Macharland FlamChen™
A large part of my adventure thus far, as the newest staff member to Tucson Audubon, has been overseeing the re-development and re-launch of the Habitat at Home program. I am pleased to announce that the program in its current version takes participants on a self-guided, educational journey to create a “living landscape” at their place of residence. What does this mean? Prior to my starting with the organization, I knew what invasive plants were (those not native to this region) and that it is important to conserve water. I did not have the understanding that I now have regarding the interconnectedness of humans, animals, plants, and water. The simple choice of what we choose to plant and maintain in our yards has a large impact on the health and sustainability of our local ecosystem. For example, one of the most common invasive plant species in Tucson and surrounding areas is buffelgrass. Buffelgrass grows in a manner that crowds and competes with native plants for nutrients and water. This invasive plant is also known for fueling wildfires. Native plants, water, and reducing wildfire threats are crucial to maintaining a vital desert habitat that provides all with the natural resources needed to survive.

The concept of a “habitat at home” goes even further and can also help us financially. Native plants use less water, which not only conserves this precious resource, but lowers our water bills. Large native trees can provide shade for our homes, which work to cool them down in the hot summers and reduce our electric bills. The program introduces participants to the notion of reusing water in the form of “greywater” and harvesting water from the collection of rain and other sources. The varieties of recommended plants, at the advanced levels, include those that are edible, which can provide us with healthy food for our table.

Did I mention how fun and exciting starting a habitat at home can be? Since assuming the responsibilities of my new position, I have become a novice birder. I notice birds now more than ever before. I understand the amazement and wonder that birders experience in identifying the various species and observing their behavior. The first level of the program is very simple to attain and recommends that you put up a hummingbird feeder and pot a few native plants to start out. I am not a homeowner and I rent a 1-acre property in a very rural area. Luckily,
the landscape came with all native plants and trees, so there are no invasive species to remove. I purchased two hummingbird feeders and followed the Tucson Audubon recipe for making nectar. I filled them both with the sticky concoction and hung them up according to the instructions. The next day I went out to “greywater” my fruit trees and there it was: a hummingbird was buzzing around one of the feeders and was sipping the homemade nectar. I ran inside the house to grab my field guide and then moved in closer to see if the hummingbird was still there. It was sitting right above the feeder on a tree branch. I could swear it was looking right at me, saying “Hi,” and allowing me the opportunity to watch it. I identified it as a male Broad-tailed Hummingbird with the gorgeous, deep red, square-cut gorget. Our moment eventually passed and my little friend flew on his way. I walked back feeling connected, with a sense of fulfillment that I am providing a consistent, reliable food source for hummingbirds. Please consider joining me on my learning journey.

Registration for the new Habitat at Home program is now open. For more information, please visit tucsonaudubon.org/habitat, email habitat@tucsonaudubon.org, or call 520-209-1808

Habitat at Home Plant Profile: Dogweed/Golden Dogweed

Lynn Hassler, Nature Shop Garden Volunteer Captain

Scientific name: Thymophylla pentachaeta syn. Dyssodia pentachaeta
Family: Asteraceae (Aster/Composite)
Native range: Texas west to southern Nevada and southern California, south through Arizona and into northern Mexico. Along roadsides and dry slopes and mesas from 2100–5000 feet
Wildlife value: Provides seeds for birds and small mammals; nectar for the Dainty Sulphur and other small butterflies; larval foodplant for the Dainty Sulphur

A delicate low-growing wildflower, dogweed lives down its humble name by covering itself with cheerful, ½” diameter golden flowers in warm months following rains. A short-lived perennial with needle-like leaves, the plant forms a low mound (8-12" tall and 10-24" wide), making it an excellent informal groundcover when planted en masse. Dogweed reseeds readily so it’s useful as a filler for bare spots in the garden. Plants are fast growing, low to moderate water users, tolerate a variety of soil types, and are hardy to 15 degrees. If winters are mild, plants may bloom on and off all year long. Dogweed is relatively rabbit resistant due to its slightly odiferous quality. In terms of maintenance, none required, although shearing in late winter/early spring may stimulate new growth. Plant in full sun for best performance.

Look closely at your plants for the eggs and caterpillars of Dainty Sulphurs (Nathalis iole), tiny yellow butterflies often found fluttering close to the ground; they are on the wing throughout the year here.
Welcome Birds Benefit Business Alliance New Members!

**SMALL BUSINESS LEVEL**

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Desert Harrier, LLC., established in 2007, includes Desert Harrier Guiding Services and Desert Harrier Images. Owner Laurens R. Halsey offers a personalized southeast Arizona bird-watching guide service customized to your schedule and target birds, while Desert Harrier Images offers images of birds and wildlife, with an emphasis on southeast Arizona.

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In 2010, Dr. Dietmar Gann and his wife Elizabeth created the Diet of Hope®. A Disease management, prevention, therapeutic nutrition program. Diet of Hope® has proven to be very successful in treating obesity, diabetes, hypertension, and other related conditions. Both Northwest and East Tucson locations, with professional staff to guide you.

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Focus HR, Inc. is a full-service Professional Employer Organization (PEO) that helps businesses save time and money in 27 states and Washington D.C. The Tucson-based company offers custom services in HR management, employee benefits, compliance assistance, workers’ compensation, retirement planning, payroll processing, and more.

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The Historic Y is a center for the arts, education, human rights and social and environmental justice, and full-service professional office building, offering long term office leases; short term space rentals for classes, meetings, recording and events; and dance and theatre classes and performances. Direct inquiries to: shawnburke@me.com, 520-622-4700, or visit TheHistoricY.com.

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**Looking for birds? We have an App for that!**

A great interactive companion to our *Finding Birds in Southeast Arizona*, the new Birding Southeast Arizona app is available for Apple iOS devices (iPhone, iPad). It covers over 130 birding sites in six sub-regions 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
- Plan your next trip by searching for sites near a city or ZIP code
- Tag your favorite spots and share with your friends
- Track and log your sightings and share custom sighting maps with your friends via Facebook

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. Android version is coming soon.

*Welcome Birds Benefit Business Alliance New Members!*
Birding Travel from our Business Partners

**Rockjumper—Worldwide Birding Adventures**
rockjumperbirding.com

**KENYA—MEGA BIRDING TOUR 2018**
Dates: April 11–May 6, 2018
Price: $10,750
Leader: Brian Finch
Spaces Available: 4
Our Kenya Mega birding tour offers twenty-six days of non-stop birdwatching as we explore this famous bird and wildlife country. Our previous Mega Tours here have recorded upwards of 800 species! Not only is this safari specifically planned to obtain a huge list of mouth-watering birds and animals, but also Kenya's most sought-after endemics and rarities.

**MEXICO—OAXACA 2018**
Dates: April 17–26, 2018
Price: $3500
Leader: Chris Sharpe
Spaces Available: 5
Our comprehensive exploration of Oaxaca is jam-packed with specialties, taking in the major birding sites of Teotitlan del Valle, Benito Juarez National Park, Cerro San Felipe, the archaeological spectacle of Monte Alban and Huatulco. The area's high level of endemicity is sure to guarantee a truly incredible experience on this 10-day tour!

**BAJA NORTH TO SOUTH**
Dates: March 16–28, 2018
Price: $4400
Leader: David MacKay
A Baja road trip is a great way to pick up a few unique Mexican endemic birds including Gray Thrasher, Belding’s Yellowthroat, Xantus Hummingbird and the Cape (Baja) Pygmy Owl. We also have a chance to get personal with the whales in the San Ignacio Lagoon. See Baja from north to south—this is the way to appreciate the dramatic geography, historical heritage and unique culture of the 775 mile long peninsula!

**TRINIDAD AND TOBAGO**
Dates: June 17–26, 2018
Price: $4000
Leader: David MacKay (and local guide)
Birding on this tropical, two island nation is a great way to see both South American and Caribbean birds including highlights such as the endemic Piping Guan and Trinidad Motmot, Scarlet Ibis, Rufous-vented Chacalaca, Tufted Coquette, Red-legged Honeycreeper, Collared Trogon and many more! We will also enjoy a stay at the wonderful Asa Wright Nature Center where the veranda birding is world class!
Water IS Life

Water Resource Protections in Arizona: How current deliberations could impact birds and all of us

Background: The Clean Water Act (CWA), Waters of the U.S. (WOTUS), and the 2015 Clean Water Rule

- Established in 1972, the CWA is the only federal legislation aimed at assuring water quality. It provides guidance on how specifically designated WOTUS should be regulated and how otherwise unavoidable impacts to WOTUS should be mitigated. In 2015, the Clean Water Rule (Rule) was proposed to clarify previous court decisions on how to define WOTUS, recognizing the complex connections between perennial waterways which flow year-round and those that do not, such as the many ephemeral and intermittent streams that characterize much of the western United States. Fortunately for Arizonans and our birds, the 2015 Rule determined that any waterway with a significant nexus to waterways with year-round flows is covered by the CWA. Arizona residents and wildlife benefit from that sensible definition. From erosion and flooding, to chemical pollutants, to impacts from development, we need the CWA and 2015 Rule to ensure the values, health and functions of our watersheds and the ecosystems our lives depend upon.

- Arizona has lost over 75% of our historic riparian habitat. 94% of Arizona waterways are ephemeral or intermittent, which we see in action every monsoon season even though they do not flow year-round. Nonetheless, our riparian areas nourish us with clean water and provide crucial habitat to 80% of the wildlife in Arizona. Examples: The San Pedro Riparian system supports more than 400 bird species—as many as 4 million birds every year—as they migrate, forage, nest and raise their young. The Santa Cruz River, much of which is effluent dependent, provides habitat for threatened and endangered species and numerous birds. The Arizona Game and Fish Department and partners have recently released the Santa Cruz Watershed Management Plan, bit.ly/2BKYGvH.

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Important federal actions

- On June 27, 2017, the Trump administration officially proposed dismantling the 2015 Rule. This announcement has left water users, providers and regulators once again uncertain, if not confused, over what will be considered a WOTUS. Governor Ducey has asked the EPA to revise federal rules to give states the power to decide which streams will be protected as “Waters of the U.S.” Ephemeral washes such as the Rillito River, Pantano Wash and a host of washes near the proposed Rosemont Mine site southeast of Tucson, including Barrel Canyon and McCleary Canyon, would not be considered WOTUS per the Governor’s recommendation, bit.ly/2kittoW.

What are the implications of the Arizona Department of Environmental Quality (ADEQ) considering the assumption of the responsibilities of implementation and enforcement of the Section 404 Permit Program of the Clean Water Act?

The CWA 404 Permit Program is currently administered by the U.S. Army Corps of Engineers in Arizona and takes over 600 permit actions per year. Section 404 of the CWA allows states or tribal governments to assume control of dredge and fill permitting from the U.S. Army Corps of Engineers (ACE) under oversight of the U.S. Environmental Protection Agency (EPA). Some states have developed wetlands and aquatic protection programs, and have assumed partial control over the permitting process, but have not assumed responsibility for the entire Section 404 permitting program. In order to assume control of the entire CWA Section 404 permitting program, states or tribes need to develop a wetland permitting program consistent with the requirements of the CWA regulations at 40 CFR Part 233 and submit an application to the EPA and ACE to assume the program. They need to have permitting standards and procedures compliant with Section 404(b)(l) guidelines, regulate similar activities, be able to adequately staff and fund the program, provide for public participation, and prove jurisdictional and regulatory authority, environmental compliance, and enforcement authority. They must prove they meet the above
For example, the oversight of approved compensatory mitigation program(s) under the 2008 Mitigation Rule, to offset unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved, is required in perpetuity. Such endeavors can significantly increase a state’s budget via direct and indirect costs. In an EPA report, members of EPA’s Wetlands Division interviewed nine states and found that the lack of implementation funding is a “threshold barrier to assumption.”

Even if a state were to assume control over the CWA Section 404 permitting program, the state does not gain control over all waterways and all programs. Applications still frequently face a need for a dual-agency process requiring multiple permits and confusion may remain over who controls what water body.

Examples: States have no jurisdiction over tribal waters; the EPA and the ACE have jurisdiction over Section 10 of the Rivers and Harbors Act (the Colorado River), and; the U.S. Fish and Wildlife Service (FWS) and the U.S. National Oceanic and Atmospheric Administration (NOAA) Fisheries Service have jurisdiction over compliance with the Endangered Species Act (ESA). All projects with a federal nexus are required to comply with the National Environmental Policy Act (NEPA), providing opportunities for the public to comment and be involved in the decision-making process. Thus far, most states have found it to be more trouble than it is worth but, under the current administration, many are looking to Arizona as a bellwether state.

The CWA has been remarkably successful in protecting public health and safety by discouraging industry and agricultural pollution and criteria by including a statement from the state Attorney General certifying that their state laws provide adequate authorities. The EPA then has 120 days to review the application and, when deemed complete, initiate a public comment period and public hearing(s), following which the EPA renders its decision. Since 1972, only two states have successfully completed the process. Assumption is much more difficult now than it was in the 1980s and 1990s, because of how much the program has changed from court cases and legal challenges which have “muddied the waters” defining WOTUS.

Why would a state pursue this option and what benefits and obstacles can be expected?

The primary reason states seek to assume control of the Section 404 permitting program is that they imagine they can streamline the permitting process better than the federal government by either matching their program to the requirements of the federal program or by developing a new program greater than or equal to federal law. This requires enabling legislation and rulemaking. States must, at minimum, comply with CWA regulations at 40 CFR Part 233, including over a dozen categories of requirements, most of which have their own unique set of rules. In addition, the financial cost of implementing a new program is significant, and it is often difficult, if not impossible, for states to manage. While the federal government provides grants for the development of a wetland program, such grants do not continue for the implementation period of a program. Immediately upon assumption, the state must absorb financial responsibility for a large number of new tasks and must have already hired and trained staff to handle the permitting process.
abuses. When the Cuyahoga River outside of Cleveland, Ohio was so polluted it caught on fire in 1969, it prompted the American people, and eventually Congress, to consider greater protections for our water and helped to spur the environmental movement. In Tucson, the Santa Cruz River effluent stream used to be one of the most toxic in the country—people were warned not to touch it! Now it is one of the cleanest and is supporting an endangered aquatic species after an absence of 74 years—the Gila topminnow, bit.ly/2kIFBG1. To weaken, or lose any of our environmental protections would be a huge step backward. If anything, we need to strengthen the CWA, the Clean Air Act and the ESA—they are our best hope and our defense to ensure our own and future generations’ health and safety.

**What are the implications of the ADEQ considering the assumption of Primacy for Underground Injection Control (UIC)?**

As with the CWA 404 permitting program, Arizona previously tried and failed to take over the EPA’s UIC federal program which is mandated to protect underground sources of drinking water (USDWs) via permitting, construction, operation, and closure of injection wells, bit.ly/2BZyY3b. Currently, thirty-four states and three territories have EPA approved primacy programs for well classes I (industrial and municipal waste disposal), II (oil and gas related), III (solution mining), IV (shallow injection of hazardous and radioactive materials) and V (non-hazardous fluids into or above underground sources of drinking water). Additionally, seven states and two tribes have applied for and received primacy approval for Class II (oil and gas related) wells only. As yet, no Class VI (carbon sequestration) primacy applications have been approved by EPA. Achieving primacy for any class will require ongoing additional funding, enabling legislation, and rulemaking. State law currently requires an aquifer protection permit (APP) program to control discharges of any pollutant or combination of pollutants that are reaching or may with a reasonable probability reach an aquifer and a permit program for underground injection control described in the safe drinking water act but, the APP, while similar, significantly differs from the UIC. Similar to the rationale for assuming the CWA 404 permitting program, “streamlining the permitting process” and “enhancing environmentally responsible growth” are stated goals and will require a fee for services structure.

**What are the implications of the ADEQ Triennial Review of Outstanding Arizona Waters (OAWs)?**

The CWA requires that surface water quality standards be reviewed and updated, if necessary, every three years through a rulemaking process known as the “Triennial Review,” bit.ly/2kLNe8U. New rules may be proposed that change the standards governing permissible levels of pollution in Arizona streams and lakes, revising which water bodies receive water quality protection and which are ineligible for continued protection under the CWA. Proposed revisions to the standards must be published for review by the public and local, state and federal agencies before beginning the formal state rulemaking process. Final action on the proposed rules is made by the Governor’s Regulatory Review Council. Currently, there are 22 Outstanding Arizona Waters or OAWs (bit.ly/2zogeyK), three of which are in Pima County. They are: Buelman Canyon Creek, Davidson Canyon and Cienega Creek. The Governor’s Office has approved an exemption to the current rulemaking moratorium for the Triennial Review at the request of Hudbay Minerals Inc., who is seeking to develop the Rosemont Mine in the Santa Rita Mountains (bit.ly/2kNbojJ and bit.ly/2oNzFe9).

Stakeholder participation is currently limited in ADEQ’s review processes. Tucson Audubon, as a founding member of the Community Water Coalition and the Sustainable Water Workgroup, advocates keeping water in our rivers and streams for nature and encourages the Governor to adopt a more open and transparent process, bit.ly/2kNFDLX. We are especially proud of Tucson Audubon Board member and co-author, Tricia Gerrodette, for her continued advocacy on behalf of our rivers!
Speaking of advocacy—
take care of yourself, stay strong, and keep up your efforts—
what YOU do makes a difference!

While talking to people about the myriad of conservation issues we are facing right now, we frequently hear about the all too common accompaniment to advocacy: burn out, depression and a sense of being overwhelmed. We all feel this from time to time. It is a rule of nature; we cannot always feel upbeat and positive and, especially in these times, your feelings are a normal response to the assaults on our environmental protections. It is important to practice self-care in order to stay effective in the ongoing battle for a safe and healthy environment. Here are a couple tips for self-care and words of encouragement:

- Recognize what makes you feel positive and negative in your life. Make lists and acknowledge both forces in your life. What can you do to shift your balance toward the positive?
- Make a list of activities you do which clear your mind and refresh your soul. These can be anything from reading to birding to petting the dog.
- Set aside a little time daily to recognize what is going on in your life and schedule your time so you can regularly make space for activities which nurture and invigorate you. Get outside when you can!
- Practice gratitude as well as voicing your opinions to decision makers and demanding action. If your representative does something you appreciate, if your neighbor does something kind, or if the sales clerk patiently listens to your rant at checkout, thank them! It is important to recognize when something goes right as well as pushing for change. Practice, practice, practice focusing on the good people do.

Remember:

- You are not alone! While it may seem that we are facing unprecedented threats to our environment right now, we are also in an era of strong activism and are witnessing a tsunami of positive action takers. More and more grassroots organizations and individuals are taking up the fight—thousands, if not millions, of people are voicing support for our public lands! Recent elections have seen a wave of dedicated new candidates and inspiring people voted into office. Now is the time to voice your support for what you value and search out others who want to help.
- What takes years to build up can be seemingly erased in a second, but we have those years of experience and mutual support on our side. People value our public lands and the health of their families and communities. Nothing can be erased if we join together, appreciate our heritage, and fight for our future.
- Activism and the rise of collective action DOES work. Sometimes you may wonder if that letter you sent made a difference or if it matters if you call your Councilmembers, Supervisors, Senators and Representatives. Simply, it does. It really does. From Margaret Mead: “Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it’s the only thing that ever has.”

“Love isn’t just something you feel. It’s something you do every day when you go out and pick up the papers and bottles scattered the night before on the corner, when you stop and talk to a neighbor, when you argue passionately for what you believe in with whoever will listen, when you call a friend to see how they’re doing, when you write a letter to the newspaper, when you give a speech and give ‘em hell, when you never stop believing that we can all be more than we are. In other words, Love isn’t about what we did yesterday; it’s about what we do today, tomorrow and the day after.”

—Grace Lee Boggs, The Next American Revolution
Shop Local: Tucson Audubon Society Nature Shop

Shop local and support the Tucson Audubon Society’s efforts to protect birds and their habitat by shopping with us at the Nature Shop. Our goal is to create a space where people can stop in to share their birding adventures, get tips on local places of interest, and find the items they need to enhance their birding experiences and celebrate a love of nature.

The Nature Shop has an impressive selection of used books, frequent seed and coffee buyer programs, a terrific kids’ section, and the staples you expect to find such as field guides and quality optics. Stop in and help us build a strong community of people who appreciate the benefits of being outside and taking time out of our busy lives to listen to the birds sing.

American Ornithological Society Meeting

Hotel El Conquistador, Tucson · April 9–14 2018

Please join us for the 136th annual meeting of American Ornithology and the second annual meeting of the American Ornithological Society, to be held April 9–14, 2018. This meeting will be a great opportunity for sharing and discussing scientific research in all areas involving birds. The meeting will place special emphasis on research and conservation focused on the 2018 meeting theme of Celebrating Connections: Birds Across Borders.

We envision a broad discussion of research that spans the breadth of modern ornithology through symposia, workshops, and contributed papers and posters. In addition to several exciting plenary presentations, you won’t want to miss:

- A free evening keynote address from Dr. Ron Pulliam, founder of Borderlands Restoration Institute and Professor Emeritus, University of Georgia.
- A free evening special symposium on 40 years of birding and research in southeast Arizona, honoring the careers of Dr. Stephen and Ruth Russell, our Honorary Co-Chairs for the meeting.
- A binational symposium on desert bird research and conservation across our southern border.

In addition, Tucson Audubon has teamed up with AOS to offer several field trips throughout the southwest desert, riparian, and forest habitats. The week will be capped off with the infamous Bird Jam featuring talented musicians from the Society and local area. Details and updates can be found at amornithmeeting2018.org.
It seems that hardly a week goes by when I don’t pluck yet another listing adventure book out of the mailbox. Most of them aren’t very good; many of them are bad. It requires rare and considerable skill to turn a big year or some other listing feat into a narrative that can hold a reader’s interest: even the most rabid of vicarious birders is likely to weary of a story whose framework is simply I Came, I Saw, I Counted—the actual title of one of the more grinding reads in the genre. Some more recent authors have sought to overcome such dryness by giving their books a personal overlay, a brave, even risky approach that can easily lead too close to the embarrassing cliffs of pathos.

A large part of what keeps more of these listing memoirs off my shelf is their constitutive need to hew to the truth. Obviously, the account of any record-breaking effort aims in part at establishing the record-breaker’s bona fides and the validity of her record; this almost guarantees that the narrative will be strictly chronological and the content heavier on facts than reflection. But what happens when a story of listing and listers is freed from any obligation to mere truth? In this, Chris White’s first novel, it lets the world of competitive birding serve as the setting for a fictional exploration of experience and the ways we remember it.

Adrian Mandrick is an anesthesiologist, an addict, and an adulterer—and the proud holder of the third-largest life list in the ABA Area. As expected in a book set in this milieu, the reader accompanies Adrian on several rarity chases, but none of them has anything like an expected result. The novel opens with Adrian chasing—literally—a possible golden-crowned sparrow down the highway in his car; the sparrow leads him into a derelict house used as a foaling ground by a ghostly herd of feral horses. Another expedition takes us on the long drive to Idaho in search of a vagrant alpine accentor. The quest takes Adrian into the middle of an ominous, reality-blurring blizzard, after which he, his wife, and a birding friend discover the rare wanderer dead on the snowy ground; on the way home, the men fail to notice that Stella, Adrian’s barely birder-tolerant wife, is not in the car. The final chase has an even more startling conclusion, when Adrian is lured into yet another surreal landscape to learn the truth about two dimly remembered childhood experiences that have determined the course of much of his life.

White’s novel is not densely plotted, but it is very carefully constructed, with a neatly paced pattern of repetitions and a network of leitmotifs linking events past and present. What binds all of those structural elements is the experience of death, the death of a family member, a rival, a bird, an entire species or tribe. It is little wonder that the pretty redhead with whom Adrian betrays his wife is a hospice nurse. In an almost offhand moment, Adrian asks her to name the most important thing she communicates to the dying and their survivors; she replies with devastating simplicity, “That it’s permanent.”

The Life List shares with the standard listing memoir a fixation on truth and how we recognize it; as a work of fiction, however, the novel is free to explore both truth and its opposite. Even as Adrian plays hard at the game of bird listing, a game whose only rule is the inviolability of honesty, he lies and is lied to with tragic results for the other parts of his life. Ultimately, it is a lie, told on an internet birding forum, that leads him, too late, to a terrible truth—and a chance to refashion his life around it.

This is not a roman à clef. At the same time, though, White constructs an impressively credible simulacrum of a certain obsessive slice of the American birding culture. eBird, the ABA, rumors and politics all play a role here, and the realism with which they are deployed makes the fictional events of the novel all the more affecting. Far from an everyday bird book, The Life List of Adrian Mandrick takes our hobby as the starting point for a thoughtful look at how memory and the truth can be manipulated and sometimes ultimately restored.
Bird species, like the Rufous Hummingbird, are finely tuned to a certain set of environmental conditions. Their physiology, behavior and genetics allow them to be successful in particular conditions. Even subtle changes in temperature and precipitation can wreak havoc on their ability to survive.

Like the many birds that migrate through Southeast Arizona, it is critical that the tiny Rufous finds the sustenance it needs to continue the journey. Tucson Audubon Society is doing all it can to assure that all birds, survive in a changing world.

Please give now. This work cannot wait.

TucsonAudubon.org/appeal

Photo Credit: Charles Trapani