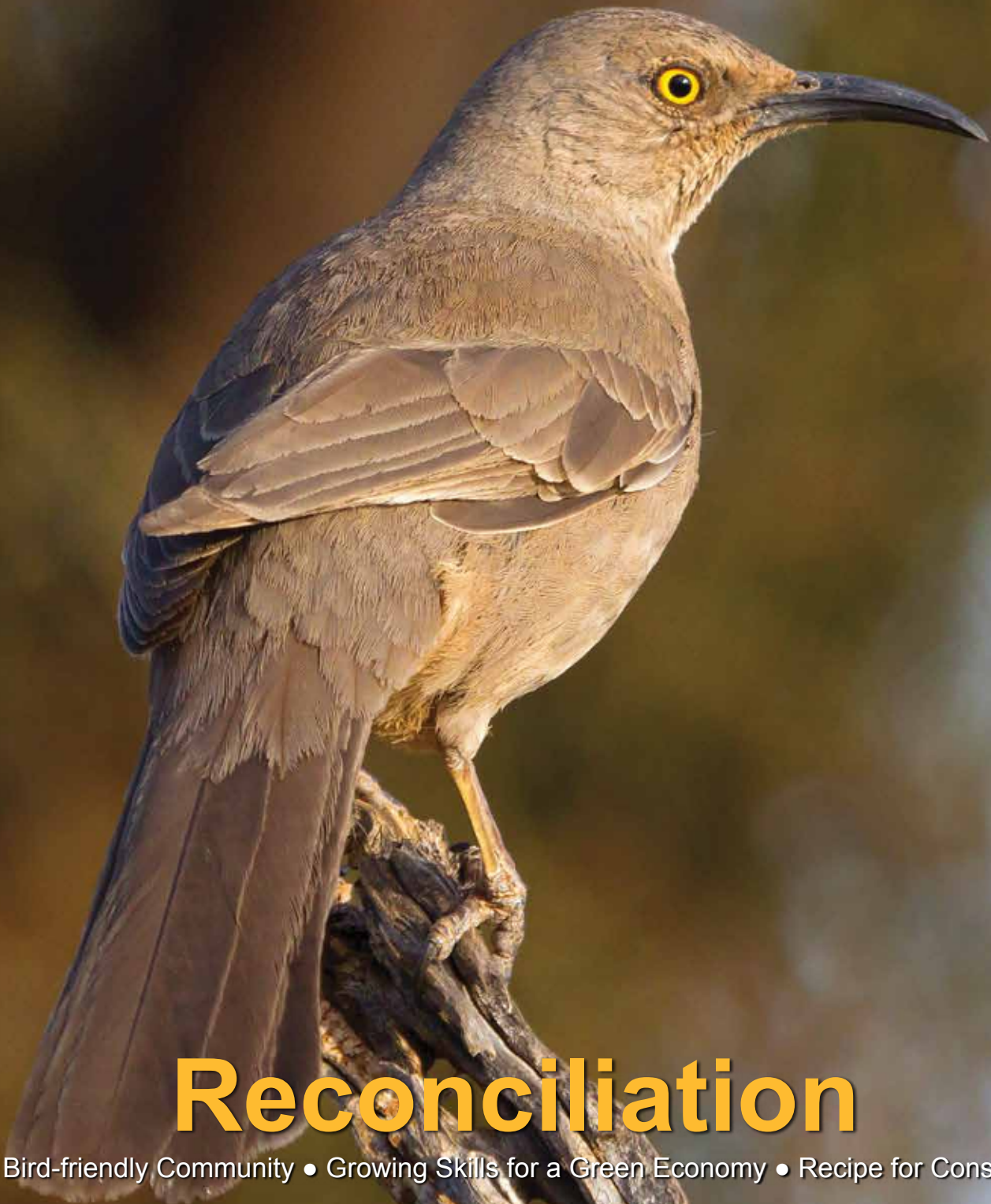


THE QUARTERLY NEWS MAGAZINE OF TUCSON AUDUBON SOCIETY | TUCSONAUDUBON.ORG

Vermilion

FLYCATCHER

January–March 2015 | Volume 60, Number 1



Reconciliation

Be a Bird-friendly Community • Growing Skills for a Green Economy • Recipe for Conservation

Down Mexico Way • Junipers and Titmice



Tucson Audubon Society is dedicated to improving the quality of the environment by providing environmental leadership, information, and programs for education, conservation, and recreation. Tucson Audubon is a non-profit volunteer organization of people with a common interest in birding and natural history. Tucson Audubon maintains offices, a library, nature centers, and nature shops, the proceeds of which benefit all of its programs.

Tucson Audubon Society

300 E. University Blvd. #120, Tucson, AZ 85705
629-0510 (voice) or 623-3476 (fax)

All phone numbers are area code 520 unless otherwise stated.

tucsonaudubon.org

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300 E University Blvd #120 ext 7015
Hours: 10 AM–4 PM, Mon–Sat
Agua Caliente Park, 12325 E Roger Rd 760-7881
Hours: Thu–Sat 10 AM–1:30 PM. Please call to confirm hours.
The shop opens earlier and closes later during certain months.

Tucson Audubon Nature Centers

Mason Center, 3835 W Hardy Rd, Tucson, AZ 85735
Open most weekdays 9 AM–5 PM or when chain is down.
Paton Center for Hummingbirds, 477 Pennsylvania Ave, Patagonia, AZ 85624

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Coordinator *Matt Griffiths* 971-7924

Proofreaders *Tucson Audubon staff and volunteers*

Design / Layout *Eng-Li Green*

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Reconciliation Ecology: Having Our Land and Sharing It Too

Guest commentary by Michael L. Rosenzweig, Professor of Ecology & Evolutionary Biology and Director of Tumamoc: People & Habitats at the University of Arizona

The land we use must not be viewed as lost to birds and other forms of wildlife. Not only is that attitude no fun, it also dooms our other programs of species conservation to very modest successes. Reconciliation ecology finds ways to make the land that we use available also to a wide variety of wild species. That way, we get to live with them, to watch them, to enjoy them even as we help their populations grow and prosper.

Unlike other kinds of conservation, reconciliation ecology does not try to restore classic habitats. That



FRONT COVER: Curve-billed Thrasher by Lois Manowitz. Lois is an avid photographer of birds and wildlife since moving to Tucson in 2006. More of her work is at www.flickr.com/photos/loismanow

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



TUMAMOC.ORG

job belongs to restoration ecology. In contrast, reconciliation ecology invents new habitats composed of both ourselves and the species groups we seek to help. So it preserves human uses and benefits, and respects human environmental preferences.

In each project, reconciliation ecology identifies a list of native species around which to design each new ecosystem. But that list is *not* restricted to rare and endangered species. Based on the scientific relationship of species diversity and area of land around the world, reconciliation ecology views all species as potentially threatened with extinction, an attitude borne out by the Audubon Society's demonstration that many species of birds, common only a few decades ago, have lost much of their populations.

Every reconciliation ecology project is local, full of the best modern natural history analyses that we can muster. Moreover, the political and organizational work required to bring about a reconciliation project is also local. And crucial! But the net effect of all this local action will be global. It will reintroduce a great deal of land into the mass of land that protects diversity and so will save large percentages of species around the world. ■



KATIE MOORE / CCL

COMMENTARY

PAUL GREEN | EXECUTIVE DIRECTOR

Becoming Agents for Disturbance

Birds. They are at the center of Tucson Audubon. We chase them. We enjoy them. But most of all they connect us to bigger things. The bird-focused Audubon movement was borne out of two things. First, a need for social change following the devastation to birds that market hunting was bringing. Second, the need to engage people to create that social change, through our elected officials, and through direct action. (National Audubon's spin doctors recently gave us their modern take on that concept: Audubon's value proposition is engagement—it's how Audubon can be separated from other environmental organizations.)

While Tucson Audubon began as a bunch of birders, it didn't take us long to get fully engaged in conservation as we saw bird habitat threatened by development in Patagonia in the 1950s. We, too, are very much a social-change, or "disturbance" organization—one that seeks to develop connections to our natural world and fights to protect functioning ecological systems.

Philosopher of ecology Joanna Macy ruminated recently that "we've been treating the earth as if it were a supply house and a sewer. We've been grabbing and extracting resources from it for our cars and our hair dryers and our bombs, and we've been pouring the waste into it until it's overflowing, but our earth is not a supply house and a sewer. It is our larger body. We breathe it. We taste it. We are it, and it is time now that we venerate that incredible flowering of life that takes every aspect of our physicality."¹

How do we as lovers of birds reconcile the way we live with what we are doing to the places and processes that birds need to live? How do you live your life differently from people you know who do not revere life on earth? How much more can you change?

At the recent Conference for Nature held in the UK, veteran wildlife commentator Sir David Attenborough called for a radical new approach to conservation.

"Nature reserves and national parks are not enough to prevent a catastrophic decline in nature. Every space...from suburban gardens to road verges must be used to help wildlife. We must embrace the changes brought by climate change and a rapidly growing human population. The whole countryside should be available for wildlife."

I smiled when I read that because for many years the University of Arizona's Mike Rosenzweig has been saying the same. In the preamble of his 2003 book *Win-Win Ecology (How The Earth's Species Can Survive In The Midst Of Human Enterprise)* he writes "There is good reason to believe that civilization need not destroy most of Earth's non-human species. The trick is to learn how to share our spaces with other species. If we do so we won't find ourselves bereft of our plant and animal cousins.... *Sharing our habitats deliberately with other species.* I call this reconciliation ecology."

With Mike's influence, Tucson Audubon has had this philosophy at the center of its thinking for some time now and this issue of the *Vermilion Flycatcher* is based on the concept of reconciliation.

I have been clearing out my office these last weeks as Eng-Li and I ready ourselves for the next stage of our lives. As I did so, I came upon notes made in preparation for my interview with Tucson Audubon's board a little over eight years ago. This was my personal mission. Thinking about the opportunity ahead with Tucson Audubon, I wrote that I was excited at the prospect of bringing about a joyful realization in people of their connections to the natural world. I wanted to help people understand how the natural

Lush wildlife-friendly oasis created by Brad and Rodd Lancaster on either side of the right-of-way outside their house in downtown Tucson

world supports them and to bring about a spontaneous understanding that they are the stewards of the world, and how they should leave the world functioning better than when they found it. Our focus should be immediate and on everyone's daily behavior. We are in the business of behavior change. That has been my guiding philosophy.

It is my hope that you, as a Tucson Audubon member, will challenge yourself daily to minimize your impact on the world and so reduce the effects we have on our fragile environment. Ask yourself the question "how much is enough." Our birds will be listening for your answer. Some modeling work shows that both Pygmy Nuthatch and Sage Thrasher will become extinct sometime this century. Those two local extinctions are the direct outcome of our consumptive way of life. It is up to us to change the one thing over which most of us have full control: how we ourselves live our lives.

President John F. Kennedy inspired a generation with his message of the empowering strength of ideas. "Too often," he said, "we enjoy the comfort of opinion without the discomfort of thought."

My hope for the future of Tucson Audubon is that we will continue to be an "agent for disturbance," and that we will all of us dig into the complexities of reality and what we face, pulling back the veil to see if we can find our way through the tangled web of our modern world. ■

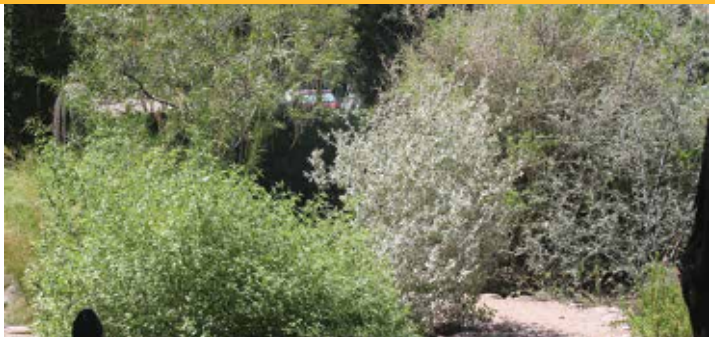
¹www.onbeing.org/program/joanna-macy-a-wild-love-for-the-world/61



KENDALL KROESEN

TUCSON AUDUBON EVENTS AND CLASSES

Southeast Arizona A Birding Wonderland



KENDALL KROESEN



MATT GRIFFITHS



VERMILION FLYCATCHER, DAN WEISZ

Tucson Audubon Bird Education Program

Become a birder or improve your birding skills and knowledge through a suite of courses offered by Tucson Audubon. Our courses are designed to take you through a natural progression that will transform you from a beginning to intermediate/advanced birder and transport you to some of the most beautiful locations throughout our region. On this page, you will find our courses listed by birding level.

The regular non-member cost of classes and workshops includes a year membership to Friends of Tucson Audubon.

ALL LEVELS

The Lower Santa Cruz River: A Birding Resource and Case Study in Conservation

The future of the Santa Cruz River is tenuous and its past and present are fascinating. An evening class will explore the history of the lower Santa Cruz River, how it came to be in its current state, and the extraordinary complexities surrounding the water in the river (see page 6 for related lecture). On the field trip we will thoroughly explore and bird the Santa Cruz River in Tucson and Marana and visit locations that demonstrate how the river now works. *This course is for birders that also want to understand and conserve the resource.*

Instructor: Kendall Kroesen

Date: February 25 & 28

Cost: \$65

Landscapes for a Bird-friendly Community: How to Achieve Landscape Recognition

There are many things we can do to make ours a bird-friendly community (see pages 14–15). One way is to landscape our yards to support local bird populations and be conservative in their use of water. We will explore what constitutes a bird-friendly yard and how that fits into the bigger picture of reconciliation ecology (see pages 2–3). This class will also give you the tools to create a yard that can be recognized as “bird friendly” by Tucson Audubon’s landscape recognition program.

Instructor: Kendall Kroesen

Date: April 11

Cost: \$45

BEGINNER

Backyard Birding and Beyond Part 1

Learn why southeastern Arizona is such a great place for birds and why bird watching is so darn much fun! The course is designed for beginners and will address how to separate birds out by habitat, seasonal occurrence, and behavior. Learn about field marks, vocalizations and much more.

Instructor: Lynn Hassler

Date: January 31–February 21

Cost: \$185/\$150 member discount

Backyard Birding and Beyond Part 2

This course begins where Part A ends and explores in greater detail the characteristics of select families, vocalizations, seasonality and migration, and tips for seeing birds year-round.

Instructor: Lynn Hassler

Date and Time: March 7–28

Cost: \$185/\$150 member discount

Register online today! Visit
tucsonaudubon.org/education
Contact for all education
activities: Sharon Long at
slong@tucsonaudubon.org,
520-629-0510 x7011

FOR MORE INFORMATION ON OUR SUITE OF EDUCATION CLASSES AND TO REGISTER ONLINE, PLEASE VISIT
TUCSONAUDUBON.ORG/EDUCATION



eBird Workshop Part 1: Let's Get Started!

This workshop will teach you what eBird is, how to use it to keep track of your personal birding accounts, and how by using it, you can contribute to a wider conservation effort. Join Jennie MacFarland, Tucson Audubon's Important Bird Area Program Coordinator, and get empowered to make your observations count! Optional pre-workshop bird walk at Sweetwater Wetlands.

Instructor: Jennie MacFarland
Date January 17
Cost: \$25

INTERMEDIATE

eBird Workshop Part 2: Advanced eBirding for Conservation

This workshop is for those who are familiar with the basic workings of eBird but want to kick it up a notch. Come learn how to make the most of your eBirding time and how to look at data and trends yourself. Bird survey analysis that eBird has done will also be discussed. Optional pre-workshop bird walk at Sweetwater Wetlands.
Instructor: Jennie MacFarland
Date: January 31
Cost: \$25

Advanced Topics: Raptor Immersion Weekend

Are you ready for a weekend full of raptors during peak migration in southeast Arizona? William S. Clark, coauthor of the *Peterson's Field Guide to Hawks of North America*, and the

Photographic Guide to North American Raptors, will give an advanced raptor workshop the weekend of March 13–15. Classroom time will be spent reviewing identification challenges of the raptors of the southwest and field time will be spent honing your identification skills. Some experience with raptor identification is desirable.
Instructor: William S. Clark
Date and Time: March 13–15
Cost: \$165

Advanced Topics: Birding by Ear

This workshop will delve into the world of bird vocalizations and give you a framework for learning the voices of our master singers. The classroom

session will introduce you to how to "see" what you "hear" with sonograms and will provide a framework for understanding what you hear. Key parts of bird song will be deciphered, including trills, buzzes, upslurs and overslurs. All this will be combined with methods to compare similar sounding species and recognize taxonomic variation and similarities.
Instructor: Homer Hansen
Date: April 16 & 18
Cost: \$145/\$110 member discount

Specialty Workshops

Taught by Homer Hansen
Sparrows: February 5 & 7
Raptors: February 13 & 15



SANDHILL CRANES, SCOTT OLMSTEAD

A Special Trip—Sandhill Cranes and a Gourmet Experience

Saturday, February 28, 2015

Don't miss the opportunity to enjoy thousands of these elegant cranes. Our luxury bus will carry you through southern Arizona to Whitewater Draw where you can see the cranes on their winter grounds, flying in huge flocks, calling noisily as they circle and land. Along the trip route lots of raptors will be perched on utility poles; and at the Draw you might find a Great Horned Owl, a Barn Owl or two, a great variety of ducks, and maybe even an eagle.

You'll learn more about cranes and conservation in a trip that combines some education and fun as

well. There will be guides to take you around the site and point out things along the way.

You will also enjoy gourmet food starting with breakfast treats, coffee and tea while getting settled on the bus. Hungry from spotting lots of birds, you will enjoy a delicious lunch, and on the way home relax with tidbits and wine.

This is a very popular trip and space is limited so don't wait! Register online for the Saturday, February 28, 2015 trip. Cost is \$75 all inclusive. Call 520-209-1801 with questions.

January 3. Living With Nature lecture (Green Valley): Urban Bird Habitat: Recipe for Conservation with *Jennie MacFarland* (see p 6)

January 10. Seven Saturdays in Patagonia (Paton Center): Hikes in the Patagonia area with guide Bryon Lichtenhan; relaxed lecture by Patagonia Area Resource Alliance (see p 9)

January 12. Living With Nature lecture (Tucson): Urban Bird Habitat: Recipe for Conservation with *Jennie MacFarland* (see p 6)

January 17. eBird workshop Part 1: Let's Get Started! (see left)

January 31. eBird workshop Part 2: Advanced eBirding for Conservation (see left)

January 31–February 21. Backyard Birding and Beyond Part 1 workshop (see p 4)

February 5 & 7. Specialty workshop: Sparrows (see left)

February 7. Living With Nature lecture (Green Valley): Roadrunner Family with *Doris Evans*. (see p 6)

February 9. Living With Nature lecture (Tucson): Lessons from Bluebirds: The Importance of Conserving an Environment in Flux with *Renee Duckworth* (see p 6)

February 10. Tucson Audubon's Seventh Annual Gala at the Hilton El Conquistador Resort. Register now! (see p 8)

February 13 & 15. Specialty workshop: Raptors (see left)

February 14. Seven Saturdays in Patagonia (Paton Center): Hikes in the Patagonia area with guide Bryon Lichtenhan; relaxed lecture by Borderlands Restoration (see p 9)

February 25 & 28. The Lower Santa Cruz River: A Birding Resource and Case Study in Conservation workshop (see p 4)

February 28. Sandhill Cranes and Gourmet Food field trip (see left)

March 1. Registration opens for 2015 Birds and Wildlife Festival (see p 22)

March 7. Living With Nature lecture (Green Valley): Creating Backyard Oases with *Kendall Kroesen* (see p 6)

March 7–28. Backyard Birding and Beyond Part 2 workshop (see p 4)

March 9. Living With Nature lecture (Tucson): Requiem for the Santa Cruz with *R. Roy Johnson* (see p 6)

March 13–15. Advanced Topics: Raptor Immersion Weekend workshop (see left)

March 14–15. Tucson Nature Shop at Tucson Festival of Books (see p 27)

March 21. Seven Saturdays in Patagonia (Paton Center): Hikes in the Patagonia area with guide Bryon Lichtenhan; relaxed lecture by Hummingbird Monitoring Network (see p 9)

April 4. Living With Nature lecture (Green Valley): What's in a Nest Box with *Jonathan Horst* (see p 6)

April 9: Birdathon Launch Party (see p 8)

April 10–May 10. Birdathon (see p 8)

April 11. Landscapes for a Bird-friendly Community: How to Achieve Landscape Recognition workshop (see p 4 and 14–15)

April 13. Living With Nature lecture (Tucson): What's in a Nest Box with *Jonathan Horst*. (see p 6)

April 16 & 18. Advanced Topics: Birding by Ear workshop (see left)

Tucson Audubon's Living with Nature Lecture Series

NEW TIME FOR TUCSON LECTURES THIS SPRING

Our lecture series is a monthly, free, public presentation that seeks to inform, educate, and entertain. We invite speakers who are experts in their fields to present on a variety of topics related to birds including biology and ecology, global, regional, and local birding hot spots and conservation issues that affect birds, other wildlife, and their habitats.

TUCSON All lectures will be held at the Pima Community College Downtown Campus, Amethyst Room, 1255 N. Stone Ave. Lectures are scheduled for the **second Monday** of each month, October through April. Please note that beginning January 2015, lectures will begin at a new time: 6:00 PM.

January 12 • Tucson



WESTERN SCREECH-OWL, NEBIRDSPUS

Urban Bird Habitat: Recipe for Conservation with Jennie MacFarland
We all have the power to create habitat for urban wildlife in our yards and neighborhoods. Do you have the desire, but need some guidance? Jennie will introduce you to "Recipe Cards" for attracting specific urban bird species into our outdoor living spaces. These cards will provide a step by step on the "how to" and will include information such as how to create yard habitat for hummingbirds, Gambel's Quail, Lesser Goldfinch, Western Screech-Owl and Curve-billed Thrasher (see also pages 18-19).

February 9 • Tucson

Lessons from Bluebirds: The Importance of Conserving an Environment in Flux with Renee Duckworth
Urbanization has eliminated habitat and resources of many avian species and this has had

MALE AZURE BLUEBIRD, LOIS MANOWITZ



devastating consequences for their populations. In response, humans have implemented conservation programs, some of which have been extremely successful. For example, the placement of nest boxes has led to species recovery and has promoted stable breeding populations for many species. However, these successes are not without consequences. In this lecture, Renee Duckworth will illustrate some of the unintended consequences of nest box programs for evolution of cavity nesting species, highlighting her work on bluebirds.

March 9 • Tucson

Requiem for the Santa Cruz with R. Roy Johnson
In prehistoric times, the Santa Cruz River once supported a large and diverse bird population. Dr. Johnson will present an analysis of the transformation of this river basin in the last half of the 1900s and how it affected the riparian avifauna of the Tucson Basin that was once supported by this verdant perennial stream.

SANTA CRUZ, LOIS MANOWITZ



JAMIE BROWN



April 13 • Tucson

What's in a Nest Box? with Jonathan Horst
Nest boxes can be an important conservation tool for supporting bird populations in southeast Arizona. Tucson Audubon has been studying the preferences of multiple species of cavity nesting birds. In an interactive presentation, Jonathan will describe these projects and their outcomes, including the findings of recent experiments regarding temperature variances inside nest boxes in the Sonoran Desert.

GREEN VALLEY All lectures will be held at the Green Valley Recreation's Desert Hills Social Center, 2980 S. Camino Del Sol. Lectures are scheduled for the **first Saturday** of the month at **10:00 AM** from November to April.

January 3 • Green Valley

Urban Bird Habitat: Recipe for Conservation with Jennie MacFarland
See Tucson description at left.

February 7 • Green Valley

Roadrunner Family with Doris Evans
Roadrunners are one of the icons of the Southwest deserts. We see them dashing about, yet few people have the opportunity to observe these birds nesting and raising a family. Through photographs and video, we follow a pair of Greater Roadrunners as they build their nest, incubate the eggs, and successfully raise and fledge five chicks.

KENDALL KROESEN

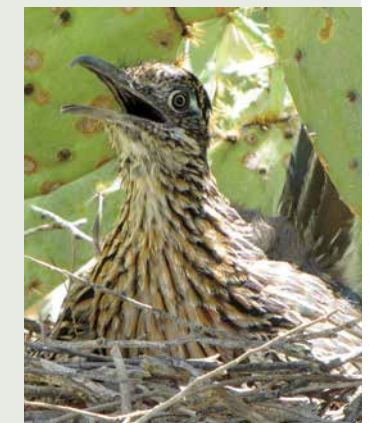


March 7 • Green Valley

Creating Backyard Oases with Kendall Kroesen
As we continually lose open space to urban sprawl, habitat for birds and wildlife is drastically decreasing. Tucson Audubon's Bird-friendly Communities Program seeks to help residents of southeast Arizona create bird-friendly and sustainable homes and yards (see also pages 14-15). This program will enable us to use the urban space we do have to support our wildlife and human populations. Kendall will describe the principles behind bird-friendly and sustainable landscapes and give you hints about how to begin planning a yard that meets these goals. While we encourage low-water use landscapes, our model is a challenge to the way the xeriscape concept is typically implemented.

April 4 • Green Valley

What's in a Nest Box? with Jonathan Horst
See Tucson description above. ■



GREATER ROADRUNNER, DORIS EVANS

TUCSON AUDUBON NEWS ROUNDUP

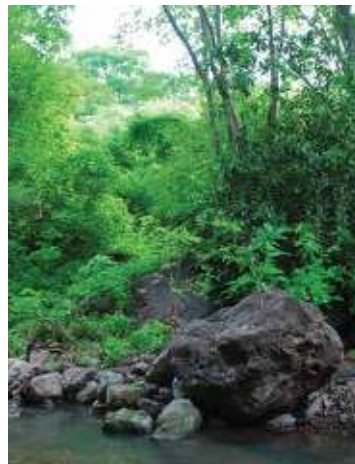
Birds Beyond Borders—An International Partnership in Important Bird Areas Arizona Important Bird Areas News



Jennie MacFarland, IBA Program Biologist

The Arizona Important Bird Areas (IBA) program has established an innovative and exciting partnership that crosses international borders. The Important Bird Areas program itself is an international effort with over 170 countries participating and BirdLife International being the global founder and organizer. Each participating country then has a bird conservation organization that runs that country's Important Bird Areas program and our Arizona IBA program is a part of the larger U.S. program. With the overall global nature of the Important Bird Areas program you might think international collaboration would be common but it is surprisingly rare. The Arizona IBA program has created the first international project involving the United States with the successful founding of the international project "Birds Beyond Borders."

Tucson Audubon has partnered with Naturaleza y Cultura Internacional (NCI) and together we were awarded a grant from the U.S. National Park Service for this project. Both the Chiricahua Mountains Global IBA in Arizona and the Reserva Monte Mojino (ReMM) in Sonora are within the Sierra Madre so are ecologically very similar and part of



Top: The Reserva Monte Mojino, the more tropical counterpart to the Chiricahua Mountains in Arizona and part of the same Sierra Madre mountain chain. Above left: The habitat in the Reserva is lush and green and full of birds familiar to birders in SE Arizona including Rufous-capped Warbler. Above middle: Rosario Jorge Saucedo Nieblas (Chin) looks up a bird during a bird survey. Right: A map showing the locations of both Important Bird Areas in the project and how they are linked topographically within the Sierra Madre mountain chain. Below: Balvanedo Aguilar Urquidez (Nelo), Charlie de la Rosa and Felix Garcia Caballero photograph and document a Rufous-backed Robin nest (inset).

the same chain of sky islands that make southeast Arizona such a destination for birders. This project will focus on cooperative monitoring between these two sky islands with a special emphasis on migrants that use this mountain range in their north-south movements. It is likely that some individual birds that nest in the Chiricahuas will pass through the ReMM on their migration

south. Migration is a dangerous and physically stressful time for birds and the resources they need to survive must remain intact along their entire route for them to successfully complete the journey. These two areas also share many resident and breeding birds such as Montezuma Quail, Bridled Titmouse and Varied Bunting and some rare vagrant species that delight birders in Arizona such as Sinaloa Wren and Yellow Grosbeak are common in ReMM. This was the basis for cooperatively monitoring the IBA in the United States and the Áreas Importantes para la Conservación de las Aves (AICA, the Mexican equivalent of an IBA) in southern Sonora.

A strong foundation for this project was laid over years of Tucson area birders traveling to Alamos, Sonora, to participate in the popular Christmas Bird Counts in the area. This partnership solidified this past

summer when the Arizona Important Bird Areas program traveled to Mexico and helped establish survey routes and teach the survey protocols to the reserve guardians that live and work within the reserve. Our Mexican partners have already completed a full season of bird surveys using Arizona IBA protocols and datasheets, and their data will be entered in the Arizona IBA database as will the data from the Chiricahua Mountains in Arizona. Birds know nothing of international borders and the only way to effectively monitor them and protect their habitats is for conservationists from different countries to work together. This is going to be a great year for the Arizona Important Bird Areas program as we turn the concept of the IBA program as an international effort into a reality.



Be Part of an Elegant Tradition at Tucson Audubon

Tuesday, February 10, 2015, at 6 o'clock in the evening

TUCSON AUDUBON'S SEVENTH ANNUAL GALA
AN EVENING FOR THE BIRDS

Bringing Nature Home

Our Gala returns to the fabulous Hilton El Conquistador Golf and Tennis Resort located on North Oracle Road. Enjoy a delicious meal and the great company of a dynamic group of conservation supporters! This festive event is an important fundraiser as well as a special time to gather in celebration of our region's unique natural treasures and to engage our community on significant issues. We will be presenting the Kenn Kaufman Education Award to Scott Richardson, and the David Yetman Conservation Award to Carolyn Campbell for their outstanding work in our education and conservation communities.

A spirited cocktail hour will feature live birds, live music, tasty

hors d'oeuvres, and an exciting silent auction offering something for everyone: overnight stays, guided birding tours, wine tastings, tickets to Phoenix Suns basketball games and the Tucson Symphony Orchestra, and many more gift items and unique experiences from local businesses.

After dinner, we'll hear from our special guest speaker, Brad Lancaster. A Tucson resident, Brad is an expert on rainwater harvesting and water management, a permaculture teacher, designer, consultant, and co-founder of Desert Harvesters. He will provide us with a fresh outlook on Tucson as a desert oasis and talk to us about how to transform our urban environment

so that it provides critical habitat for wildlife and helps us conserve our precious water resources.

The Gala is sure to be memorable! We have had an overwhelming response from our sponsors this year and tickets are limited! Reserve your place online. Tickets are \$150 each; tables for ten from \$1500. A portion of the ticket price is tax-deductible. A more informal buffet dinner including vegetarian and regular fare will be enjoyed.

For more details and to buy tickets, please visit tucsonaudubon.org/gala. Contact Bete at 520-209-1812 or bjones@tucsonaudubon.org with questions.

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Kimberlyn Drew and Andy Moore
Sandy and Karl Elers
Debra Finch
Cynthia Pruett

BIRDATHON 2015 | **A Fun[d]raiser** **SAVE THE DATE FOR BIRDING**

You know how Tucson Audubon's work for our birds needs much more support this year as we restructure some of our activities. You've read that our overall goal by the end of Spring 2015 is \$500,000. Along the way we have set a series of mini-goals, that include Birdathon, as a way for us to reach that stretch goal.

MAKE YOUR BIRDING COUNT! We often ask you to donate funds. Birdathon is a way by which *you go birding* and ask *others* to give! Those are two unique features of Birdathon. It is key to our fundraising goals to go outside our usual group of valued donors—your friends, family, business acquaintances, neighbors, hair dressers, employers. It's actually easy to ask people to give—we'll give you some pointers. Any amount helps and friends can pledge directly to you or donate online.

THE KEY TO SUCCESS this year is expanding your list of supporters to engage new people and raise the interest of community members. Birdathon is fun for everyone—kids, adults, beginners and experts!

Never done Birdathon before? Come to our **Birdathon Launch Party** on **April 9** and learn how to sign up, receive asking tips, and size up fellow competitors!

Stay tuned for details on our website tucsonaudubon.org/birdathon.

**FROM APRIL 10
TO MAY 10, 2015**
we are raising \$50,000—
that's one-tenth of our of
our 2015 fundraising goal.



GILA WOODPECKER, LOIS MANOWITZ



SARA PIKE

ARTWORK BY MARTHA PILLE

Tucson Audubon's Paton Center for Hummingbirds

Richard Grand Memorial Meadow

Celebration and Dedication

Keith Ashley, Coordinator: Tucson Audubon's Paton Center for Hummingbirds



ALL PHOTOS BY KENDALL KROESEN



Upper left: John Hughes walks the loop trail around the Richard Grand Memorial Meadow; upper right: Paul Green and Marcia Grand; upper circle: Red-breasted Nuthatch; lower left: Board members Les Corey and John Kennedy; middle right Jonathan Horst and David Dunham; lower right: Larry Morgan and Bonnie Paton-Moon.

In early December 2014 the virtual community of birders and conservationists who joined forces in 2013–14 to purchase the former home of the Patons in Patagonia gathered together in real time—and a real community was born.

The occasion was the **Paton Center for Hummingbirds Celebration and Dedication of the Richard Grand Memorial Meadow**. The event drew 100 people to the project, more than 70 of them major donors from around the country. This was the donors' first opportunity to meet up as a cohort of Paton supporters. George Fenwick, President of American Bird Conservancy; Victor Emanuel, Director of Victor Emanuel Nature Tours; gracious benefactor Marcia Grand; and Bonnie Paton-Moon, daughter of Wally and Marion Paton, were just a few of those attending. Over the course of the weekend new bonds were forged. New pledges to fund the beloved birding site's evolution are now rolling in.

At the high point of festivities—as the lovely new meadow adjacent to the home lot was being dedicated in memory of Tucson attorney Richard Grand—a Red-breasted Nuthatch descended the mulberry tree to take a sip from the new water feature. The message was clear: "Success for birds and birders alike!"

In addition to celebrating the reward of their investments thus far, visiting supporters were introduced to a wide range of infrastructure and interpretive projects that will together realize Tucson Audubon's vision for the future of the Paton Center. University of Arizona Architect Annie Kurtin introduced the public to our initial dreams for an elevated wildlife-viewing pavilion that would preserve the intimacy of the Paton experience while providing safe, universal access and a 360-degree viewing experience.

Other proposed projects include: a creek-side restoration project; composting toilet; fruit orchard and pecan grove restoration; county-wide hummingbird citizen science school curriculum; upgraded driveway; a variety of water-harvesting features; a front yard pollinator garden; hummingbird and wildlife cams; an interpretive site package; and more. Several members of the community stepped up immediately to pledge funds for making these dreams a reality sooner than later—but many of the projects still seek funding. You can view them yourself at tucsonaudubon.org/patonvip.

Other events included in the weekend were the inaugural hanging of bluebird boxes in Sonoita as part of the **Win-Win for Azure Bluebirds and Arizona Vineyards** conservation project (another program seeking

funding) and a sunny, Sunday morning bird tour by local expert Rich Hoyer. Rich delighted his troop with a variety of highly effective bird calls, an intense knowledge of biogeography, and great views of a Hepatic Tanager, Arizona Woodpecker, Gray Flycatcher, and a basking Madrean Alligator Lizard.

Over the course of the last year Tucson Audubon has encouraged the Paton Center for Hummingbirds to evolve naturally from its previous incarnation as a private home with a public backyard into a wildlife-viewing center that continues to provide access to southeast Arizona's biodiverse bounty while maintaining the tranquility for which it is also famed. Wally and Marion Paton opened their lives to birds and their gates to birders several decades ago. Their legacy lives on as Tucson Audubon's restoration-ecology team transforms the land

Seven Saturdays in Patagonia 1/10, 2/14, 3/21: featuring a hike in a neighboring area, a relaxed lecture on a local conservation topic, and a picnic at the Paton Center (support the local economy and purchase your food in town). You can participate in one, two, or all three of these activities. Registration for the hike and the lecture are required and are separate. Visit tucsonaudubon.org/paton or see page 5 for more details of the hikes and lectures.

surrounding the home to bird-rich habitat—with amenities to enrich birders' experiences—and the Tucson Audubon staff creates volunteer opportunities and programming for the site.

GREATER ROADRUNNER, DORIS EVANS



THANK YOU TO OUR DONORS

Gifts in Honor/Memory:

In honor of Paul & Eng-Li Green from Leslie Baird, Barbara & William Bickel, Bonnie & Les Corey, Mary & David Dunham, Shari & Edward Montgomery, Cynthia Pruett, Rosemary Valentine, Peggy & Brett Wilmore, Linda Phelan & Mort Womack

In honor of Canny Clark from Susan Clark

In honor of Joan Donnelly from Joan Donnelly & David Taylor

In honor of Julia Gordon from Margherita Gale Harris

In honor of Richard Grand from Clay Stribling

In memory of Ronnie Sidner from Hal Ware

Thank You to Our Frequent Flyers

Ardeth Barnhart, Myrna Beards, Melanie Builder, Karen Chandler, Andrea Cohen, Janet Cohn, Mich Coker, Christine Curtis, Sandy Elers, Alice Farley, Peggy Ford, Marcy Gray, Mike Judd, John Kennedy, Susan Kozacek, Erin Olmstead, Deb Vath, Nancy Young Wright, Claire Zucker

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

Meet Sharon Long, Tucson Audubon's New Volunteer Coordinator

Sharon Long is the newest member of the Tucson Audubon staff and has come on as Volunteer Coordinator and Outreach Assistant. She spent her childhood roaming the hills of central Pennsylvania, but her life and future changed in college when a bird bander placed a Song Sparrow in her hands. She immediately switched her field of study to ecology with an emphasis in ornithology—never forgetting that first Song Sparrow. She took over the banding project the following year.

Her varied career has included nature guide in Vermont's Green

Mountains, wildlife refuge biologist, state park naturalist, and east coast marine mammal director for Greenpeace. She was a registered lobbyist for the state of Vermont, working on a single animal welfare issue. She understands the importance of volunteering through her own volunteering experiences with the Fund for Animals, Defenders of Wildlife, and for the last eight years, as a docent with the Arizona-Sonora Desert Museum. She is looking forward to meeting all the wonderful and devoted Tucson Audubon volunteers!



Contact Sharon about volunteering!

volunteer@tucsonaudubon.org

520-209-1811

tucsonaudubon.org/volunteer

WELCOME NEW MEMBERS



BARN OWLS, CHAD KING / CCL

Molly Anderson & W. Morris Farr, Margaret Anderson, Eloise Anderson, Maria Aparicio, LaVonne & Darrell Bahm, Norm Bertram, Ami Havens & Sherman Bodner, Evan Bornholtz, Michael Brown, Susan & Collins Cochran, Kathy Coleman, Jon Coppa, Sandy Davis, Kristin Delaplaine, Kathy & Julian Donahue, Harvey Kivel & Nolan Dwinell, Yvonno Endvizi, Audrey Eskue, Mary Fitzgibbons, Linda Fowler, Francie Galbraith, Carol Goldberg, Betsy Hall, Christine Hansen, John Hess, Julie Holding,

Jennifer Isaac, Jane & Michael Jarrett, Alison Jones, Sharon Judevine, Steve Kaye, Elizabeth & Hal Kingslien, Lynda Klasky, Marilyn Latta & Bill Bremner, Ann Liebert, Russell Long, Kathleen Marvel, Mary Ellen & Gary Mencimer, Elma Michaelis, Bridget Milnes, Karen & Tim Morey, Karen Morley, Kathy Morrow, Pat Mount, Dale Newberg, Sonja Olsen, Brian Oremus, Karyn Otten, Terry Pelech, Sonia Perez-Padilla, Alice Perkins, Lois & Mike Rose, Alan Rosenfeld, Susan Sanders, Sharon Scott, Salek

Shafiqullah, Barb & Bill Shannon, Eileen Sherlock, Thomas Shumard, Louise Simon, Mary Smith, Jamison Somner, Melodee Thorwegen, Karen Topham, Celeste Troon, Lucas & Stephanie Van Latum, Marjorie & Clague Van Slyke, Gail Wachtel, Amanda Webb, Lynn Welscher, Tim Winkler, Steve Wren, Pam VandeWater & Mark Wright

Diana Rosenblum, Membership & Development Assistant

Volunteer Update

Sharon Long, Volunteer Coordinator

Volunteer Shindig Highlight Reel

Among the many exciting volunteer activities of Fall 2014 was our first Annual Volunteer Shindig, an evolution of our annual Volunteer Cookie Exchange. This is how Tucson Audubon shows its appreciation to our volunteers. There was food, music, thanks from individual staff, many raffle prizes, and free artwork. Tucson Audubon could not achieve its many conservation goals without our dedicated, cheerful, and hard-working volunteers. We appreciate you!



ALL PHOTOS BY JENNIE MACFARLAND

Visit tucsonaudubon.org for updates and more.

Meet Jessie Bhangoo.

Between the talented and varied staff at Tucson Audubon there are many things that we know how to do and accomplish. However, there are many things that we do not know how to do and that is why Jessie Bhangoo is the featured volunteer this issue. Jessie knows how to do very technical things and watching him fix a database that I somehow unlinked (in other words, I broke it) in under ten minutes is like watching magic happen.

Jessie has generously donated his time and extremely valuable skills to Tucson Audubon for years and has made the Arizona Important Bird Areas database and its online data entry portal work in the first place and hum along ever since, all as a volunteer. It is always exciting when Jessie visits Tucson as is his habit between tech jobs that take him all over the country and even the world. Jessie loves to use his downtime productively and when he is in Tucson he works on some of the computer database and web projects that have gathered up and makes them operate with incredible efficiency and stability.

Jessie made one of his trips to Tucson late November 2014 and stayed for much of December and boy did he get a lot done! He helped move the Tucson Bird Count database to a new server and tweaked the online data entry portal so it runs much smoother now and the data results tables look a lot better as well.

He also helped move the Arizona IBA database from its ancient computer into a much newer one and then fixed my IBA website while he was there.



JENNIE MACFARLAND

Jessie Bhangoo on his first birding trip in Sweetwater Wetlands, December 2014.

Another project involving digitizing Gale Monson's historical bird data from the 1950s and 1960s that I am working on would not be possible without Jessie's help. He created an online data entry portal and then went on to take a personal interest in the project and figured out what many of the cryptic codes Gale used on his data notecards mean in terms of locations. Jessie is amazing!

Another amazing thing about Jessie is that he has helped Tucson Audubon so generously for all these years and he is not a birder. When I learned that Jessie had never ever been birding we decided to fix that and Jessie did his first ever birding at Sweetwater Wetlands in December. Now Jessie has moved on again to other computer jobs, this time in Southern California, but will likely continue to help fix databases that I break by logging in remotely as he has done in the past. Good luck Jessie, we cannot thank you enough!

Jennie MacFarland
IBA Program Biologist

Record Your Volunteer Hours Online

Don't forget to record your volunteer hours online for discounts on great Nature Shop items. And did you know you can now use your points toward education class discounts? Any questions contact Sharon at slong@tucsonaudubon.org or 520-209-1811.

Welcome to our New Volunteers

Christopher Vincent, MaryEllen Landen, Robert Brandt, Anne Townshend, Alex Johnson, Pam Emerson, Marilyn Doherty, Pauline Woodruff, Aline Barbeau, Katherine Locke, Rick Fletcher, Alice Cave, Volker Poelzl, John Hughes

Birds and birding in Mexico

Down Mexico Way

BOB BOWERS

Sinaloa Wren, Rufous-backed Robin and Nutting's Flycatcher. Fan-tailed Warbler, Yellow Grosbeak and Streak-backed Oriole. If it shows up on the Arizona/New Mexico Listserve and draws a crowd, odds are that it wandered north from its Mexican home. After all, Tucson lies just 60 miles from Arizona's 389-mile border with Mexico, and birds pay little attention to fences, surveillance cameras, or the border patrol. But why wait for those errant rarities to visit Arizona, and then confront crowds of curious birders trying to spot the same travel-weary bird? If you live in southeastern Arizona, you can drive to Alamos in 10 hours, and Mazatlan is closer to Tucson than Denver. Those birds listed above are a fraction of the thousand species found across our southern border, and discovering these wonders on your own is much more fun than lining up in a crowd. If you've thought about birding Mexico but don't know where to start, look no further than Sonora, the state that borders Arizona.

Sonora is Mexico's second largest state, and at 70,000 square miles is just 60 percent as large as Arizona. To the west, Sonora has 500 miles of coastline along the Sea of Cortez and to the east, Sonora's pine forests rise to 8,600 feet. Between these extremes lie the Sonoran Desert, grasslands, thornscrub, and the northernmost reaches of the tropical deciduous forest. In other words, it has some of the richest bird habitat imaginable. eBird lists 100 hot spots and 521 species, including parrots, woodcreepers, magpie-jays, caciques, euphonias, and many other birds that have yet to visit Arizona. Those rarities that sometimes cross our border typically can be found easily on your own down south.

Take boobies for example. Blue-footed and Brown boobies are marine birds more associated with the Galapagos than a landlocked state. Nevertheless, both birds make occasional forays into Arizona. Over a two-week period last August, a juvenile Blue-footed Booby drew crowds to Patagonia Lake (134 eBird checklists), and from October 2013 into late February

ALL PHOTOS BY BOB AND PRUDY BOWERS



2014, one to three Blue-footed Boobies plus a Brown Booby were star attractions on Lake Havasu (156 eBird checklists). Lake Havasu is a 5-hour, 311-mile drive from Tucson. By contrast, San Carlos is 328 miles in the opposite direction from Tucson, a drive that takes less than 6 hours including stopping for a visa. Large numbers of both boobies can be found there easily. San Carlos is nestled on the coast, with a large American population and cactus-covered hills that tower over the sea. Beaches, coves, bays and estuaries provide a varied shoreline, and calm waters offer easy kayaking, one of the most enjoyable ways to find both boobies, as well as Brown Pelicans, Magnificent Frigatebirds, and endemic Yellow-footed Gulls among many others. Two-person kayaks rent for \$45, and can be delivered to (and picked up from) your choice of entry. Kayaking from San Francisco Bay through a south point tunnel takes you to a small island favored by boobies and pelicans, and crossing the mouth of San Carlos Bay leads you to a shell-strewn beach where you can watch Eared Grebes fishing under the clear waters of the cove. Alternatively, high-rise condos and hotels along Algodones Beach face the open ocean, providing great opportunities to watch feeding seabirds, as well as spectacular sunsets. On one December stay, we sat on our balcony and watched hundreds of boobies circling high above the sea



Above, top to bottom: San Carlos, Sonora; Algodones Beach, San Carlos; Birding by kayak, San Carlos. Left: Brown-footed Booby

and falling like waves of arrows into a mass of bait fish. It was one of those bucket list experiences, and no farther from home than Lake Havasu. When considering your birding options, don't forget Sonora. ■

Bob writes nature and travel articles. He writes a birding column for an Arizona newspaper, and he and his wife, Prudy, travel and bird extensively throughout Mexico.

On page 7, you can read about Tucson Audubon's innovative and exciting new partnership with Naturaleza y Cultura Internacional to expand the Important Bird Areas program south of the border. Years of Tucson area birders traveling to Alamos, Sonora, to take part in the Christmas Bird Counts there provided the strong basis for this initiative. See page 24 for trips to Mexico offered by Tucson Audubon's Birds & Business Alliance member Solipaso Tours.

Junipers and Titmice

RICH HOYER

This is an easy lesson in botany with two species of closely-related trees that turn out to be very different from a bird's perspective. Let's start with the common knowledge that there is a group of birds very closely associated with junipers, or at least pinyon-juniper woodlands. If this is news to you, think of a bird that has "juniper" in the name—Juniper Titmouse. The same habitat is mentioned for others in any field guide: look up Gray Flycatcher, Gray Vireo, Western Scrub-Jay (the interior "Woodhouse's Jay"), and Pinyon Jay; all seem to be absent unless there is at least some juniper.

If you have looked at the high diversity of trees in the Madrean pine-oak woodlands, you have probably noticed that the handsome Alligator Juniper (*Juniperus deppeana*) is a very common component of these forests, mixed with several species of oaks and pine including Mexican Pinyon (*Pinus cembroides*). And then maybe you noticed that every one of these juniper-specializing birds is missing from these forests. What is going on here?

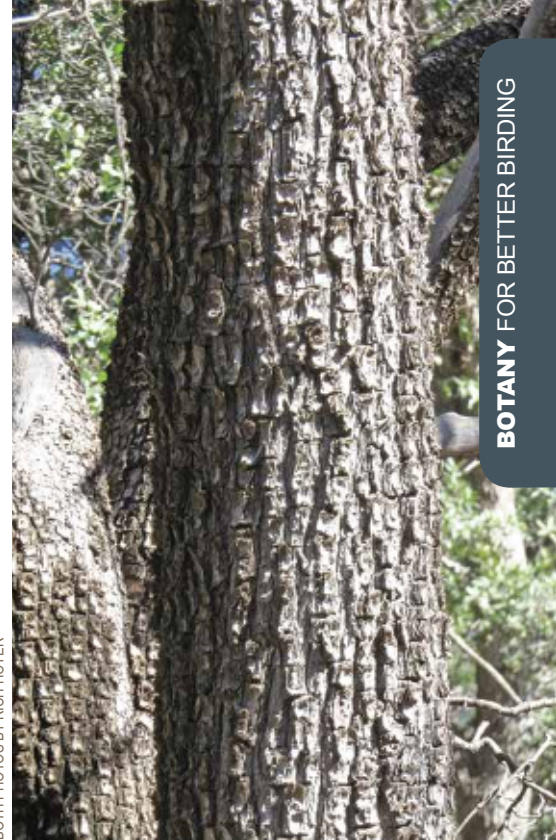
But then did you know we have two species of junipers in southeastern Arizona? And did you know that being able to tell them apart will help make you a better birder? Fortunately, they are easy to tell apart. Let me introduce you to the Redberry Juniper (*Juniperus coahuilensis*). This species occurs in scattered locations throughout the lower foothills in southeastern Arizona, sometimes in large stands, but usually well below any species of pine, though in many places they are mixed with the lowest elevation oaks (Mexican Blue and Emory). And in many of these juniper woodlands you can find these birds. One of the best areas is near Paradise on the east side of the Chiricahua Mountains, while close to Tucson the Reddington Pass area has some nice stands. A surprisingly large and nearly pure (and utterly unexplored) stand occurs to the east of Hwy 83 near the Rosemont Junction.

Each species of bird has its own, unique biogeography—biological factors affecting its survival and breeding that result in their actual distributions—but what leads them to choose the Redberry over Alligator Juniper as its preferred tree has never been written about.

Now consider Carol Beardmore's 1994 masters thesis on the Golden-cheeked Warbler, a bird that is very closely associated with oak-juniper woodland in central Texas. She discovered that the bird exclusively makes its nest with the stringy fibers that are available only on old growth Ashe's Juniper trees. Where the trees are too young or are absent, there are no Golden-cheeks. It should now be immediately obvious that one sharp difference between Redberry and Alligator Junipers is that the latter, unique among junipers, has no bark fibers. As a matter of fact, it turns out that juniper bark shreds are important components in the nests of nearly all of the aforementioned bird species. Other species of juniper in North America (Eastern Redcedar, Western, Utah, and One-seed are a few) also have shreddy bark.

So it appears we have at least one answer, or at least another strand identified in the complex web that is the mystery of biogeography for a few of these species. Gray Flycatcher doesn't breed at all in southeastern Arizona, and there would seem to be habitat for them here if a stringy-barked juniper is all they need. We know that Pinyon Jays require plentiful pinyon or other pines (for food) mixed with the juniper, they and have very large communal territories. Without that habitat here, we therefore see Pinyon Jays in SE Arizona only every 20 or so years when the pine nut mast fails and they stage an irruption. What about Western Scrub-Jays, which don't necessarily feed on pine nuts and aren't known to use the bark of juniper in their nests, yet are strangely local in SE Arizona where there is at least some Redberry Juniper? Since we don't know the whole story for any of these species,

BOTH PHOTOS BY RICH HOYER



The handsome Alligator Juniper is unique in lacking a shreddy bark, perhaps rendering it nearly useless to birds.

Juniper Titmouse forages extensively in junipers and often includes bark shreds in its nest.

there is still something to be learned by paying closer attention. ■

Rich Hoyer is a Senior Leader for WINGS Birding Tours Worldwide, wingsbirds.com/leaders/rich-hoyer.

2015 Challenge: Be a B

KENDALL KROESEN | URBAN PROGRAM MANAGER

Our 2015 challenge to you: Make your community bird friendly!

At Tucson Audubon we think a lot about what a bird-friendly desert community looks like. How do we reconcile our settlements—designed around human desires—with the needs of wildlife? The following answers have emerged, and we challenge you to help us make reconciliation ecology a reality!

Preserve natural open space: Urban sprawl needlessly converts our rich upland desert—full of vibrant wildlife—into less biologically productive developments. Pima County's Sonoran Desert Conservation Plan, with its conservation land system and obligatory open space set-asides, helps to address this. There are plans to maintain wildlife corridors, including wildlife roadway under- and over-passes, that also help.

You can speak with your wallet by purchasing homes in established communities and by eschewing new developments on the edge of the desert. The desert edge is seductive, but today's edge is tomorrow's new development. *Tell your elected representatives* that we need more urban infill and constraints on sprawl.

Conserve resources: Human settlements also harm birds by extracting resources elsewhere. For example, the majority of our (Tucson area) water comes from the Colorado River, where extraction of surface water for agriculture, industry, and cities has killed uncounted birds in the now-desertified Colorado River Delta. Pumping it here through the CAP

canal requires huge amounts of coal-generated electricity, resulting in strip mining, pollution and greenhouse gas emissions. We also import consumer goods, food (especially meat), building materials, and garden products that degrade habitat elsewhere. We import electricity from plants that emit greenhouse gases at a difficult-to-predict cost to future wildlife habitat (see the July 2014 *Vermilion Flycatcher*).

Make a difference by radically conserving energy and potable water. Use as much gray water and harvested rainwater as possible to replace use of potable water for irrigation. Do not build a pool, or if you already have one, convert it to landscape or a rainwater cistern. Swim at the gym or the local public pool! You can *speak with your wallet* by avoiding meat (especially conventionally-raised beef) and choosing locally produced and recycled products when possible. Recycle always.

Conserve rivers and washes: The Santa Cruz River is the reason Tucson exists. Yet it has gradually desiccated over the last 100 years because there is no agency, no law, and no person that is in charge of saving the river and its bird-friendly vegetation. None of the water in the river even *belongs* to the river. The treated effluent that flows perennially in the Santa Cruz through Tucson belongs to governments and Native Americans (through a water rights settlement).

Currently, some share of each of these entities' effluent is released into the river, but there are disincentives for leaving that water in the river. Tucson Water has publicized plans to recycle its share into potable water. Pima County is removing more and more of its effluent to sterile recharge basins. Will there be any left for wildlife? Tucson Audubon and partners will fight for the river,

and you can *tell your city and county representatives* that you want a flowing river for birds *and* for birding. Also, *tell your state representatives* to give 100% credit to effluent owners for "managed in-stream recharge" in the river. The current 50% credit rule motivates effluent owners to send it to infiltration basins and golf courses rather than to birds. Learn more about the river in the class on page 4 and the lecture on page 6.

Conserve urban open space: Parks and other open space create bird habitat in our communities. We are working hard to let cities and counties know that the natural open space they own, especially those managed by their parks and recreation departments, are important to birds and birders.



Bird-friendly Community

Landscapes for a Bird-friendly Community: Introducing the Tucson Audubon Landscape Recognition Program

NOTE: This program is scheduled to launch in 2015 but the timing of the launch is now dependent on raising money to support it. Please consider supporting this program or call us with advice about how we can cover its costs. We believe this can be a landmark program helping to significantly improve the quality of habitat in the greater Tucson metro area.

- Have you eliminated non-native, invasive plant species?
- Is at least part of your yard densely landscaped with a variety of native plants?
- Do you pledge to use only the safest pesticides or none at all?
- Do you harvest rainwater or use gray water?
- Do you do other things for birds like have a feeder and a birdbath, hang a nest box, create a brush pile, use dark-sky lighting, support pollinators?

If you do these and other things—in at least in part of your yard—you may qualify for recognition. A handsome sign will denote that your yard is a Tucson Audubon Bird-friendly Yard! Go to www.tucsonaudubon.org/urban and learn how your yard can qualify at the Silver, Gold or Platinum level. Then fill out the application form.

Tell your city and county representatives that we need open space inside the city, and that natural plant communities are valuable to birds and birders. Let them know that parks don't need to be all water-thirsty grass, and that native bird- and pollinator-friendly shrubs and trees are valuable to you!

Make homes and yards bird friendly: A huge percentage of the city consists of our homes and yards. We can reconcile our landscapes with the needs of birds by planting a wide variety of native plants, creating multiple layers of vegetation, emphasizing organics over rock and, again, by harvesting rainwater and gray water. We should also eliminate exotic invasive plants, minimize pesticides, keep cats indoors, reduce window collisions and do other things to support birds.

To help achieve these goals, Tucson Audubon continues to develop printed and website information to get you started. Key available resources are listed below and more are at tucsonaudubon.org/urban.

- *Guide to Food-rich Landscapes for Birds and People*—a guide to bird-friendly and sustainable landscaping, featuring strategies, different combinations of species for different

Left to right and top to bottom: A nice, dense patch of vegetation in an urban landscape; Fairy duster (*Calliandra eriophylla*), a bird-friendly native plant; Lush demonstration landscape in the front yard of the Tucson Audubon Nature Shop; Gambel's Quail—we know how to create their habitat; An innovative rainwater-harvesting landscape in a Tucson neighborhood; Verdin emerging from a nest—encourage them to nest in your yard with the right vegetation; Rainwater-harvesting city landscape at the north end of Reid Park.

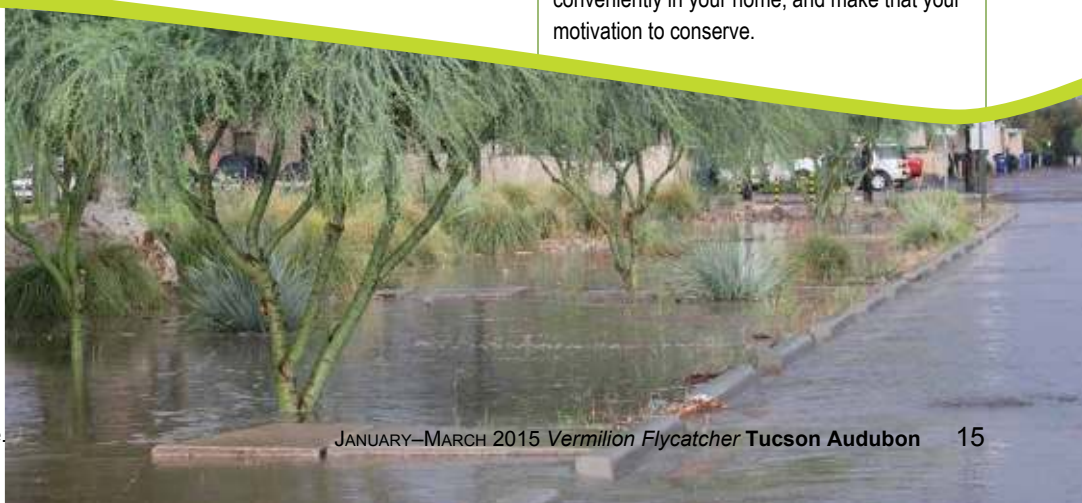
looks and goals, and a list of the most useful native plants.

- *Recipe Cards*—Specific “recipes” for attracting hummingbirds, kestrels, screech-owls, quail, cactus wrens, thrashers or goldfinches to your yard (see story on page 18).
- *Nest Boxes for Urban Birds*—Some declining bird species may just need more holes in which to build nests. Go to www.tucsonaudubon.org/nestbox for more information.
- *Green City News*—an e-newsletter that comes out about once a month with the latest landscape and sustainability news.
- *Landscape Recognition: Landscapes for a Bird-friendly Community*—When you create a landscape with enough bird-friendly and sustainability features, we will recognize your effort. See sidebar. ■

A WATER THOUGHT EXPERIMENT

Imagine a one-gallon plastic jug of water on the shelf at the grocery store. Now imagine 95 of them. That's how much water the average Tucsonan uses every day at home! Only one or two are used for drinking. Many are used by the washing machine, the toilet, showers, tubs and faucets. But even though we've reduced lawns and converted to xeriscapes, about forty-five percent of this water is used outdoors.

If you had to buy 95 one-gallon jugs every day, you bet you would conserve! Change your thinking about the water that arrives conveniently in your home, and make that your motivation to conserve.



#AudubongoesWILD:

Growing Skills for the

KEITH ASHLEY | PATON CENTER COORDINATOR, ANDY BENNETT | RESTORATION PROJECT MANAGER, AND JONATHAN HORST | RE

Tucson Audubon and the Western Institute for Leadership Development (WILD)—a Tucson charter high school—have received a \$25,000 Toyota TogetherGreen grant to equip students with environmental restoration skills while building sustainable, urban wildlife habitat on their 10-acre campus just south of 22nd Avenue. The grant was one of just 19 awarded nationally this year through the ongoing Toyota and National Audubon partnership. The project is a great example of reconciliation ecology in action—creating an urban nature scape that’s a win-win situation for wildlife and people alike.

On Nov. 24 and 25, two full school days were devoted to kicking off the ambitious grant project: *Growing Skills for the Green Economy*. Several other agencies from around Tucson—Northwest Wildlife Rescue, the Community Food Bank, Tucson Clean and Beautiful, and Access Tucson—joined in to support the work.

MISSIONS (NOT IMPOSSIBLE)—

Tucson Audubon’s mission to promote the “protection and stewardship of southeast Arizona’s biological diversity through the study and enjoyment of birds and the places they live” dovetails nicely with WILD’s mission to “develop student leaders who turn ideas into action” and their vision of all graduates being “prepared for college, careers, and civic engagement to make an equitable and sustainable world a reality.” WILD

Academic Director Luis Perales and Tucson Audubon staffers Andy Bennett, Jonathan Horst, and Keith Ashley introduced the grant project to students in terms of these missions with an emphasis on green-economy careers as potential futures for today’s youth.

RESCUE BIRDS: Citan, Luna, Elfie—

Northwest Tucson’s Wildlife Rescue team brought a Harris’s Hawk (Citan), a Great-horned Owl (Luna), and an Elf Owl (Elfie) to provide students a visceral connection with the urban wildlife that stands to benefit from habitat restoration efforts. Wildlife Rescue volunteers artfully presented their feathered companions



HARRIS'S HAWK, PIPER WEINBERG

and told stories of how each had suffered a collision with humanity. The story of the rescue agency’s founders, Janet and Lewis Miller, provided an inspiring example of the ways in which people can step up in support of the natural world, turning ideas into action.

SUSTAINABLE GREENHOUSE BUILDING

A key sustainability component of the *Growing Skills* project is building a cistern-fed greenhouse that will enable WILD to produce its own native plants for schoolyard restoration and neighborhood native plant sales into the future. Even before the first grant meeting, WILD student Caleb Pipes had produced a site design for the school as part of a Sustainability Design class. Claudio Rodriguez of the Community Food Bank and WILD social studies and environmental literacy teacher Oscar Medina worked with Perales, Pipes, and twenty other students to begin erecting a smaller version of the proposed greenhouse. This model will serve as a demonstration for the neighborhood—a compact hoop-house that neighbors might build at home or in shared community spaces.

ECOLOGICAL RESTORATION with GPS + GIS

Bennett and Horst teamed up with WILD science teacher Nicole Snook and mathematics instructor Ramon



PIPER WEINBERG

Green Economy

RESTORATION ECOLOGIST

Muñoz to introduce students to ecological restoration using GIS for analyzing and mapping results. The group set up six 100 m² study plots, marked their locations with GPS, and documented the plants growing there. They then analyzed the density of invasives on the plots to understand the scope of work for the whole site. This preparation is foundational to monitoring the future success of the school's restoration efforts.

BOTANICAL PRESSING and SKETCHING

WILD Assistant Director and Visual Arts Specialist Linda Cato organized a workshop for plant collection and identification, specimen pressing, and botanical sketching so that students could begin to gain intimate knowledge of native and invasive plants. When 8th graders from La Paloma Academy joined the class for a couple of hours, Audubon staffer Ashley introduced them to the birds the project hopes to support. Cato then directed the students in first sketching and then painting these birds with watercolors.

DOCUMENTATION & PRESS CONFERENCE

WILD Executive Director Judith Anderson joined forces with Lisa Horner and Larry Foster of Access Tucson

and Piper Weinberg, video and photo documentation instructor, to lead a group of students in developing their media skills by documenting the days' events on video and with still shots. The groups created b-roll footage for local press and edited their footage to create a short video. In addition, Perales organized a mock press conference for the entire school and visitors so that everyone could practice these invaluable outreach skills. Students brainstormed many potential hashtags for connecting the project with social media, but voted overwhelmingly for #AudubongoesWILD.

REMOVAL OF INVASIVES

The second day of events wrapped up with a visit from Erin Willett of Tucson Clean and Beautiful and a full-school buffelgrass removal party. The Ecological Restoration group had already become experts in identifying buffelgrass in its various appearances, as well as Russian thistle (tumbleweed) and Sahara mustard. These experts were able to guide others and make sure that valuable, native plants were not removed as well.

Photo spread showing various activities at WILD during kick-off days for "Growing Skills" grant. All photos by the WILD Documentation Team and Piper Weinberg.



MORE TO COME ... SEEKING VOLUNTEERS

These two days marked the beginning of the year-long project which will include several related community outreach workshops at the school. If you would like to become a volunteer with Growing Skills for the Green Economy, please contact Andy Bennett at: abennett@tucsonaudubon.org.



Urban Bird Habitat— Recipe Cards for Conservation and

JENNIE MACFARLAND | IBA PROGRAM BIOLOGIST

TUCSON · BIRD · COUNT



Bringing Birds Home

If you are a bird enthusiast living in Tucson, there is a good chance you have heard of the Tucson Bird Count. Perhaps you also know that this locally grown citizen science project is focused on discovering where in the larger urban Tucson valley various native bird species are able to live and even thrive. If you have really been engaged with the **Tucson Bird Count** you may also be aware that count locations within the natural habitat of Saguaro National Park, which lays on both the eastern and western edges of Tucson, serve as experimental controls for this count. This is a lot of information and in my three years so far as coordinator for the Tucson Bird Count, I have realized that a surprising number of Tucson birders do know and understand all of this but I have been very surprised to also discover that almost no one knows about the larger purpose behind the count—reconciliation ecology.

This conservation aspect of the Tucson Bird

Count is, to me, the real power and driving force behind this groundbreaking and innovative citizen science project and was a key part of the count's creation. Long ago in 2001, the Tucson Bird Count was dreamed up by Mike Rosenzweig, a professor at the University of Arizona, and Will Turner, then-graduate student (now with Conservation International). Both were very interested in urban habitat. The concepts of urban green space and gardening for wildlife are now reasonably common, but back in 2001, xeriscaping (personified with the image of a gravel expanse with one little cactus in the middle) was considered the environmentally conscious choice. Dr. Rosenzweig had pioneered the idea of reconciliation ecology (see page 2) earlier in his career and the concept is fully laid out in his book, *Win Win Ecology*, which

is definitely worth reading. The basic idea of reconciliation ecology is that humans can mitigate the damage development and agriculture have caused to native wildlife by creating habitat for wildlife within our cities and farm fields. Turner had this innovative concept in mind when he established the Tucson Bird Count. The larger purpose of this project was to determine how Tucson residents could provide urban habitat for native birds.

The Tucson Bird Count was masterfully designed, with over 900 established point count locations evenly spaced across the Tucson valley that are annually counted by skilled birder volunteers. With over 14 years of data revealing where the different native bird species occur within Tucson, we can draw conclusions about what different species need to thrive in an urban setting. Now it is time for the always intended, long awaited second phase of the Tucson Bird Count—outreach to the general public. Dr. Rosenzweig had always envisioned this outreach taking the form of “recipe cards”—that is, a recipe for creating the right habitat in your yard for a specific bird or group of birds. An easy example is hummingbirds: the recipe for making your yard useful to hummingbirds is reasonably obvious. Planting nectar-producing flowers and hanging a

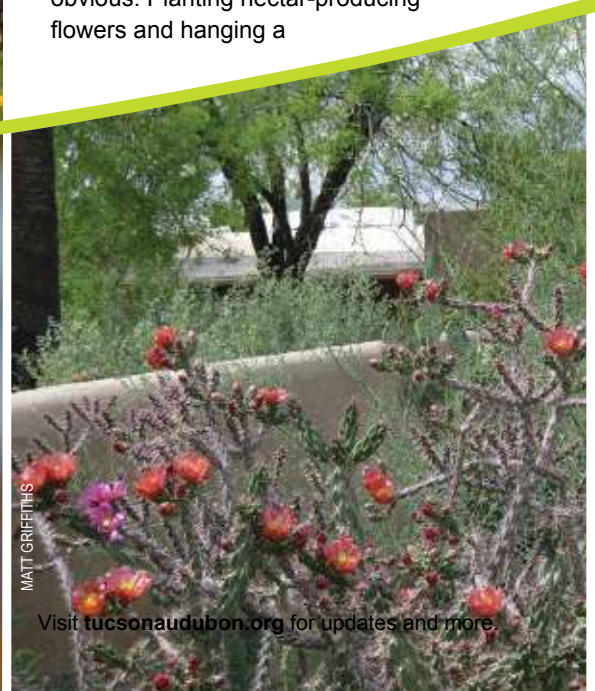


MATT GRIFFITHS



BROAD-BILLED HUMMINGBIRD, LOIS MANOWITZ

MATT GRIFFITHS




Reconciliation Ecology

hummingbird feeder will likely attract them to your yard. This is the basis of an entire industry. Most people generally like having birds in their yard, which is what makes the “recipe card for native birds” concept so powerful for conservation.

After fourteen years, the concept of recipe cards has become a reality. In partnership with Saguaro National Park, Tucson Audubon was awarded a Heritage Grant by Arizona Game and Fish to produce five different Recipe Cards for native birds and launch our **Bringing Birds Home** initiative. Most birders already get this concept and have created some level of bird habitat around their homes, which is why birders are not our target audience. These cards were created for all Tucson residents, to encourage people who may never have heard of a Pyrrhuloxia or a Phainopepla to create patches of lush habitat around their homes for the benefit of native birds and wildlife. It is for this reason that we showcased very desirable and recognizable bird species on these first five recipe cards. We started with that most effective of

“gateway birds,” hummingbirds, which are universally popular and reasonably easy to attract to your yard. The first set of recipe cards also feature Gambel’s Quail, finches (both Lesser Goldfinch and House Finch), Tiny Raptors (American Kestrel and Western Screech-Owl), and Cholla Dwellers (Curve-billed Thrasher and Cactus Wren). Another major goal of the Bringing Birds Home project is to reach people who would normally never encounter Tucson Audubon, so these cards were launched at the last Southern Arizona Home Builders’ Association Home & Garden Show, a completely new venue for Tucson Audubon. We are also partnering with the Girl Scouts and nurseries all over town to increase the effectiveness of this outreach for urban bird conservation.

It gives me great pride to realize that the Tucson Bird Count has now come full circle. This count was founded on the idea that someday the data from the count would be used to show Tucson residents how to share our city with native

birds and wildlife using the concepts of reconciliation ecology. Now here we are, with a booth at the Home Show where I handed a recipe card for attracting hummingbirds to an enthusiastic woman who looked at a card for a moment and then said to me: “I love hummingbirds but I didn’t know there was more than one species of hummingbird in Tucson. So where can I buy these plants this card says I should plant in my yard?” And that truly is a win-win, for native birds and for all of us. 

One larger purpose of the Tucson Bird Count project is to determine how Tucson residents can provide urban habitat for native birds such as Broad-billed Hummingbird (below, far left) and Lesser Goldfinch (below). The Bringing Birds Home initiative represents the outreach phase, providing residents with recipe cards (above) for creating lush habitat, such as that pictured below, for a specific bird or group of birds.



MATT GRIFFITHS

LESSER GOLDFINCH, BRYAN SMITH

CONSERVATION AND EDUCATION NEWS

CHRIS MCVIE, MATT CLARK, PAUL GREEN, KENDALL KROESEN, JONATHAN HORST, BÉTÉ JONES, AND JENNIE MACFARLAND

Threats to Bird Habitats in Southeast Arizona: Updates

Compiled by Matt Clark, Conservation Advocate

OAK FLAT, VALERIE COZART / CCL



Omnibus Defense Bill: A Big Mixed Bag for Conservation

On December 19th, President Obama signed into law the National Defense Authorization Act of 2015, a \$585 billion budget bill that funds legitimate governmental functions. However, the “must-pass” budget bill was also used by lawmakers as a vehicle to pass a sweeping public lands package and over 100 riders unrelated to national defense. Because Congress faced a very short timeline to pass the legislation in order to prevent a government shutdown, none of the bill’s most controversial measures were referred to committee, nor were their merits debated on the floor. Some prominent environmental organizations are calling the bill an overall victory for conservation, while others see it as a net loss for our natural world and lobbied unsuccessfully to have the mixed bag of lands provisions stripped entirely.

On the positive side of the conservation ledger, the bill adds approximately 250,000 acres of public lands to the Wilderness Preservation System in Colorado, Montana, New Mexico, Nevada and Washington. The bill creates or significantly expands six National Parks, transfers the 90,000-acre Valles Caldera National Preserve in New Mexico from the U.S. Forest Service to the National

Park Service (NPS), and requires the NPS to study additional sites for potential future inclusion in the park system. On the negative side of the conservation ledger, the bill eliminates wilderness study area protections on 14,000 acres in southeast Montana, and other wilderness study areas in that state will be targeted for oil and gas extraction. The bill transfers approximately 110,000 acres of public lands into private ownership, including 70,000 acres in Alaska’s Tongass National Forest slated for transfer to the tribal Sealaska corporation for logging and other development and 12,500 acres to the town of Yerinton, Nevada for development in an area around an existing copper mine.

In Arizona, one of the most controversial measures in the bill was introduced by Senator John McCain (R-AZ). It authorizes a land swap on the Tonto National Forest giving foreign mining companies, Rio Tinto and minor partner Broken Hills Properties, 2,400 acres of National Forest near Superior in exchange for ~5,000 acres of “environmentally sensitive” lands elsewhere. Rio Tinto’s subsidiary, Resolution Copper, has plans to develop a massive copper mine on the acreage located around Oak Flat and Apache Leap, an area previously withdrawn from mining exploration by Presidential Order of President Eisenhower. Since 2005, the proposed land swap has

repeatedly failed to pass on its own merits in both houses of Congress. The move to insert the controversial land-swap into the defense bill has upset the public because of the outstanding cultural, ecological and recreational values of the greater Oak Flat / Apache Leap area, serious water and subsidence issues, and because of the clear intent to short circuit the public process required by the National Environmental Policy Act. Eighty Native American tribes across 25 states, including the San Carlos Apache, have registered a unified opposition to the land swap because they hold the lands in question as sacred and instrumental to their ability to freely practice their spiritual beliefs. The bill removes a requirement that the mining company consult with the tribes about the mining project. Tucson Audubon has been vocally opposed to the Oak Flat land swap since its inception and we are taken-aback that the democratic process has been undermined by sneaking it into an unrelated, “must-pass” defense spending bill at the 11th hour.

The defense bill also contains controversial provisions that require the Bureau of Land Management (BLM) to fast-track grazing, oil and gas permitting. Grazing permits on public lands will automatically be extended from 10 to 20 years and can now be renewed before their respective environmental reviews are completed! The bill eliminates voluntary retirement of grazing permits in Oregon and New Mexico. The bill also includes a provision that will prevent the Department of the Interior from listing the Gunnison Sage-Grouse or Greater Sage-Grouse as endangered species for one year. These provisions contradict science-based management of our public lands and wildlife and run counter to the intent and purpose of the Endangered Species Act. While this bill is a win for wilderness in some

regions, it is also a loss to the integrity of other wild places, creatures and the open, transparent democratic process itself.

Comment Period Extended for Yellow-billed Cuckoo Critical Habitat Proposal

In an October 14 public advisory, the U.S. Fish and Wildlife Service announced it will re-open the public comment period on its proposal to designate 546,335 acres of critical habitat for the western population of yellow-billed cuckoo in 80 separate units in nine western states. Critical habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery.

Tucson Audubon will be submitting detailed comments on the proposed designation and believes we need to eliminate or reduce threats to the cuckoo by restricting livestock grazing in riparian areas, eliminating the use of pesticides on adjacent lands, and reducing the risk of tower collisions. To promote recovery, we must also create opportunities to expand available riparian habitat through water leases and markets, switching to arid adapted crops that require less water, and aggressively restoring the habitats upon which the cuckoo depends. The final designation should be expanded to include critical habitat for stopover, foraging, sheltering and dispersal areas, as well as additional unoccupied



YELLOW-BILLED CUCKOO, NEBIRDSPLUS

areas with restoration potential to form large blocks of suitable cuckoo nesting habitat. We encourage our membership to submit individual comments in support of maximum protection for the declining cuckoo and its habitat. Refer to the Federal Register Notice for more information, including how you can submit comments: <http://www.gpo.gov/fdsys/pkg/FR-2014-11-12/pdf/2014-26685.pdf>

Conservationists Challenge “Sunnyside” Mining Project Approval

Defenders of Wildlife and the Patagonia Area Resource Alliance have filed a legal complaint against the Forest Service and the Fish and Wildlife Service for the agencies’ approval of a major mineral exploration project dubbed “Sunnyside,” located in the heart of the biologically diverse Patagonia Mountains of the Coronado National Forest. The disputed approval was granted via a “categorical exclusion,” which would have allowed the project to move forward without conducting a detailed environmental assessment. The Canadian mining company Regal Resources proposes to drill numerous exploratory holes up to 6,500 feet deep in the Alum Gulch area. Disturbance from the project would occur 24 hours a day, 7 days a week for many months. The area supports habitat for the imperiled Mexican Spotted Owl, Yellow-billed Cuckoo, lesser long-nosed bat, jaguar and ocelot. Of particular concern is a proposed drilling site located only one-tenth of a mile from the core nesting area of a Mexican Spotted Owl “Protected Activity Center,” designated to protect the threatened owl.

Open Pipe Study Highlights the Danger Posed to Birds and Need for Action

A recent report released by the American Bird Conservancy (ABC) shines new light on a little studied threat to birds: open pipes. An article by ABC summarizing the report states: “Open pipes, widely used



A dead Mountain Bluebird (inset) documented in an open pipe that serves as a gate post of the gate pictured (top).

for a variety of purposes across the western U.S. landscape, have been reported as a ‘potentially very large’ source of bird mortality.” The finding was part of a peer-reviewed study¹ authored by Los Alamos National Laboratory scientists Charles D. Hathcock and Jeanne M. Fair. The researchers conclude, “Based on these preliminary findings ... open bollards and pipes pose a potentially large-scale threat to birds, and research on the impacts of this threat, especially to cavity-nesting birds, should be encouraged and considered in management plans.” The research studied pipes in three circumstances in Northern New Mexico and documented cases where the pipes had caused bird deaths. In one study area located at the Los Alamos National Laboratories (LANL) in the Jemez Mountains, the scientists studied more than 100 uncapped, 4-inch open bollards. More than 25 percent of the open pipes were documented to contain dead birds. The research also examined 88 open pipes with 3.5–4 inch diameters that are used to anchor gates on LANL. Eleven percent of these open pipes contained dead birds. According to the ABC research summary article, “Western Bluebirds accounted for 61 percent of the identifiable affected bird species. Other species identified included: Ash-throated Flycatcher, Acorn Woodpecker, Spotted Towhee, House Finch, White-breasted

Nuthatch, and Western Scrub-Jay ... Many existing pipes still need to be capped or removed and new engineering and building standards are urgently needed by all land management agencies to prevent the use of open pipes in the future.”

What can we do to tackle this problem? One simple solution: if you have any open pipes on your own property for fencing or other structures, make sure the top is sealed so that birds can’t get into them. Encourage your neighbors or people you know to do the same. Send a message to Bureau of Land Management and Forest Service leaders to thank them for the progress they have made to eliminate this threat—and to urge them to take further action. Go to: <https://secure2.convio.net/abcb/site/Advocacy?cmd=display&page=UserAction&id=175>

¹ Hathcock, C.D., J.M. Fair, 2014. Hazards to Birds from Open Metal Pipes. *Western North American Naturalist*. Vol 72, No 2. Online at: <https://ojs.lib.byu.edu/spc/index.php/wnan/article/view/32779>

Northern Gray Wolf’s Trek to Kaibab Plateau Highlights Importance of Continental Conservation

According to the authoritative website *Lobos of the Southwest*, “The U.S. Fish and Wildlife Service has confirmed, through DNA tests on scat, that there is a female northern Rockies gray wolf on the Kaibab National Forest, near the north rim

of Grand Canyon National Park in Arizona. This brave female is the first wolf in this area for more than 70 years!” Wolves were completely eradicated in the American West by the powerful livestock lobby and government-sanctioned hunting programs (except in the Western Great Lakes area where they persisted). Sadly, by the 1940’s, the howl of the wolf was silenced on the North Kaibab Plateau by such programs. And now the wolf has returned to the Kaibab, not via direct reintroduction, but by following its own instincts in search of new territory, prey and a mate. This female wolf is thought to have traveled hundreds of miles from the Yellowstone region where wolves have been successfully reintroduced by the U.S. Fish and Wildlife Service. Her amazing journey highlights the importance of the Grand Canyon Ecoregion as a prime location for future wolf recovery efforts as well as the need to protect the core habitats and corridors that enable such important wildlife dispersal movements to occur. The arrival of this northern gray wolf in Arizona underscores the importance of maintaining strong legal protections for the northern gray wolf under the Endangered Species Act, as wolves have regained less than a tenth of their historic range in the lower 48 states. It also makes clear the value of maintaining habitat for extirpated creatures so they have a chance to return. Read the full story on our Blog at: <http://tucsonaudubon.blogspot.com/2014/11/northern-gray-wolfs-trek-to-arizonas.html>



BOTH PHOTOS CHUCK HATHCOCK

GRAY WOLF, AZ GAME AND FISH DEPARTMENT

“All About Birds” EcoProgram

Bete Jones, Outreach Manager

There is an ever present, monumental need to provide opportunities for America’s youth to spend more time outdoors for their own well-being and for that of our natural world. Beginning in 2015, the Sonoran Joint Venture, Ironwood Tree Experience (ITE), and Tucson Audubon will partner to develop a new EcoProgram, “All About Birds,” that will be run through the Ironwood Tree Experience. The goal of this collaboration is to provide opportunities for southern Arizona youth ages 12–18 to spend more time in the outdoors, both for their own well-being and to support bird and habitat conservation in the region. Monthly outings to unique, local, birding hot spots will be led by ITE staff and Tucson Audubon volunteers.

This program will teach Sonoran Desert natural history and ecology with a strong emphasis on bird species, along with skills for

identifying birds native to the region. Lessons and activities will promote knowledge, understanding, and appreciation of the natural world and local, native habitats and teach youth about conservation challenges and successful projects. Youth will interact with local professionals, volunteers, and other young people who are interested in nature and the outdoors and be invited to share their feelings, thoughts, and ideas about environmental stewardship and conservation education. They will be encouraged to develop leadership and collaborative skills in an outdoor setting and to participate in social, academic, volunteer, and employment opportunities with a focus on environmental studies, adventure education, or conservation practices.

In November 2014, we piloted the program and a group of ten youth rented bikes from BICAS and did a biking/birding tour on The Loop,

Tucson’s biking/walking trail along the Rillito River.

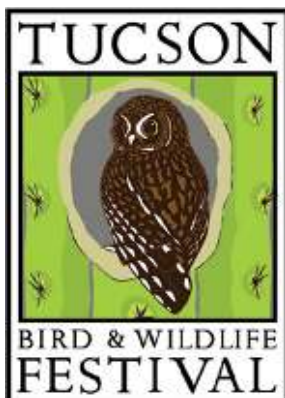
This program is made possible in part by the Edmund R. Caldwell Memorial Scholarship Fund and we are in the process of procuring additional funding. If you would like to volunteer to help facilitate these outings, please contact Bété Jones, Tucson Audubon Outreach Manager at bjones@tucsonaudubon.org.



NORTHERN CARDINAL, JEREMY HAYES



DEBORAH OSLIK



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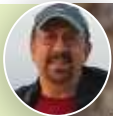
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REGISTRATION OPENS MARCH 1

SATURDAY KEYNOTE by Paul Baicich, author, birder, conservationist, and recipient of Ducks Unlimited’s 2014 Wetland Conservation Achievement Award (Communications).



Montezuma Quail / Robert Shantz



Sonoran Desert landscape / Larry Liese



Red-faced Warbler / John Hoffman



Five-striped Sparrow / Rich Hoyer-WINGS

FRIDAY KEYNOTE by Rick Wright, a Senior Leader at WINGS Birding Tours and Review Editor at Birding magazine.



Elegant Trogon / Dominic Shernoy



White-eared Hummingbird / Lois Manowitz



Gray Hawk / Collins Cochrane



Flame-colored Tanager / James Prudente

FOR DETAILS AND ONLINE REGISTRATION, VISIT TUCSONAUDUBON.ORG/FESTIVAL

Wildlife Garden Plant Profile

Lynn Hassler, Garden Volunteer Captain

This series profiles the plants that grow in the Tucson Audubon Wildlife Garden at University Boulevard and 5th Avenue.

Bamboo Muhly

Scientific name: *Muhlenbergia dumosa*

Family: Poaceae (Grass)

Native range: Rocky canyons and valleys, mostly below 4000 feet, in southern Arizona and northern Mexico

Wildlife value: Upright arching stems provide shade and hiding/roosting/ nesting/perching sites; leaves and stems used for nest building. Bamboo muhly is a perennial bunchgrass with bright green foliage that grows moderately fast to 4 feet high and wide. Plants have a soft billowy, bamboo-like appearance. Light green flowers are insignificant, but the wispy seedheads, about 1' long, add to the graceful look.

Grow plants in full sun or partial shade. They are drought tolerant once established but look better with some supplemental water during the warm season. Cold hardy to 10 degrees, they require little maintenance other than occasional haircuts to invigorate new growth. Remove older canes to maintain a tidier appearance. Plants spread slowly from underground stems, eventually forming a large clump.

The ground beneath the arching branches provides an ideal site for nesting Gambel's Quail. The female scratches out a shallow basin, often bordering it with small twigs and lining the bowl-shaped scrape sparsely with grass, leaves, or feathers. Songbirds love to perch on the feathery stems of bamboo muhly as they sway in the wind.

Since most ornamental grasses are finely-textured, they make



TROUPEL

handsome contrasts when placed next to bold sculptural plants. Cozy them up with an agave, aloe, or cactus, or plant adjacent to a large boulder. Position plants so that you have the opportunity to view them when they're backlit by the sun. The translucent quality of their stems is best appreciated in early morning or late afternoon.

The ground beneath the arching branches of Bamboo muhly (above), a perennial bunchgrass with a soft billowy appearance, is an ideal nesting site for Gambel's Quail (left).

There are additional grasses in the *Muhlenbergia* group that are useful in the wildlife garden; some provide copious amounts of seeds for birds and small mammals. The genus is named in honor of Gotthilf Heinrich Ernst Muhlenberg (1753-1815), a German American clergyman and botanist. ■

LYNN HASSLER

Conservation Corner!

Ways to Grow Water Awareness

Tucson-area water use has decreased steadily—a good trend.

We push rainwater harvesting and gray water as a way to conserve potable water and have a lush yard for birds. However, much of our collective water conservation has been driven by demographics and changes in building standards. For example, whether or not their occupants try to conserve water, houses built since 2000 use less water due to better plumbing, better

fixtures and low-water use appliances. In addition, today fewer people want backyard pools, so pool construction is a fraction of what it used to be.

You do not need a new house in order to take part in this trend. Make 2015 the year you get a water audit from the Tucson Water Zanjero program which is free and will help you identify potential water savings in your house. Fix plumbing, get better fixtures, and if you need a new clothes washer or dishwasher, get the most water efficient model you can afford. If you have a pool, convert it to another use!

Create a free account at the Conserve to Enhance website. This site has a "dashboard" that tracks your water use, including any reductions that you achieve through conservation. You then have the option of making a donation to the program based on the amount of money you saved by using less water.



The money is used to give grants to organizations that do restoration along washes and streams in the Tucson area. Tucson Audubon has received two of these grants, so your contributions are well spent!

Tucson Audubon is a member of the Community Water Coalition (CWC). Its mission is: "To provide leadership and guidance toward water policy that sustains healthy ecosystems and quality of life in the Tucson area and lower Santa Cruz

River watershed." Read more at its website, given below. ■

Zanjero Program: water.tucsonaz.gov/water/zanjero-program

Convert your pool: http://tucson.com/lifestyles/home-and-garden/garden/new-uses-for-old-swimming-pools/article_6c1d1b73-9536-5649-8133-af044978132a.html

C2E: www.conserve2enhance.org

CWC: www.communitywatercoalition.org.

Kendall Kroesen
Urban Program Manager

PHOTOS BY KENDALL KROESEN



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Namibia, Okavango & Victoria Falls Overland IV Tour Dates: 12–29 Aug 2015

(18 days). Price (per person) US\$6,420. Our popular Namibia, Okavango & Victoria Falls overland tour visits some of the major highlights of three of Africa's most remarkable countries. This comprehensive tour combines the endemic birds of the Namib Desert with spectacular tropical savanna and wetland species and a plethora of wildlife including the fabled Big 5. Some of the sites that we visit include Walvis Bay, Etosha, the Okavango Delta and Victoria Falls.

Bolivia Mega Birding Tour Tour Dates 01–23 Sep 2015 (23 days). Price (per person) US\$ 7 750. Bolivia is the new frontier of Neotropical birding. With over 1350 species, including many endemics, the country's scenery and both natural and cultural diversity are wondrous to behold. Red-fronted and Blue-throated Macaw, Red-tailed Comet, and Scimitar-winged Piha are among the many star species we hope to see on this comprehensive tour.

Please note: these rates are subject to foreign exchange fluctuations.



Rufous Sabrewing

DOMINIC SHERONY / CCL

SOLIPASO TOURS

www.solipaso.com

Yecora-Alamos: April 7–15 and July 3–11, 2015. \$2500. Leader: David MacKay. A complete sierra to sea tour! We'll see the montane species around Yecora, including Mountain Trogon and Rufous-capped Brushfinch. In the colonial town of Alamos, we stay at the beautiful El Pedregal Nature Lodge and see birds like Black-throated Magpie Jay, Mexican Parrotlet and Elegant Trogon. Our last day will be on the coast to pick up more coastal species. See the best of Sonora...the place we call home!

El Triunfo, Chiapas: March 19–31, 2015.

\$3200. Leader: David MacKay. A trip of a lifetime into the backcountry of the Sierra Madre de Chiapas. This is a supported hiking and camping trip into the pristine El Triunfo Biosphere Reserve, with pack mules to carry gear, staff to set up tents and cook, as well as expert guides...but hiking 4 to 8 miles each day is a part of the experience. You can see such species as the highly endemic Horned Guan, Cabanis's Tanager, Rufous Sabrewing and White-faced Quail-Dove...400 great species possible! We also look for endemics in Sumidero Canyon and the Pacific Slope. ■



Red-tailed Comet

RON KNIGHT / CCL

AVAILABLE IN OUR NATURE SHOPS



Tucson Audubon thanks our Birds & Business Alliance Members, who have shown their support for bird conservation through annual contributions and in-kind donations. **Please show them you appreciate their support for us by supporting them.** Visit tucsonaudubon.org/alliance for more information, including links to member websites.

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Arizona Birder Casitas • www.azbirdercasitas.com

Bed and Bagels of Tucson • 520-603-1580

Brooklyn Pizza Company • 520-622-6868

Carl Zeiss Sports Optics • www.sportsoptics.zeiss.com

Casitas at Smokey Springs Ranch • 520-870-8778

Down By the River B&B • 520-720-9441

Circle Z Ranch • www.circlez.com

Celestron • www.celestron.com

Financial Architects • www.financial-architects.com

Hughes Federal Credit Union • 520-794-8341

Kimberlyn Drew, Realtor • 520-237-1408

Leica Sport Optics • www.leica-sportoptics.com

The Living Fence • 520-795-5300

Visit Tucson • VisitTucson.org

Opticron USA • www.opticronusa.com

Lori Pascarella, Merrill Lynch • www.fa.ml.com/Lori

Pima Federal Credit Union • 520-887-5010

Quailway Cottage • 520-558-0019

Staybridge Suites Tucson • 520-807-1004

Victor Emanuel Nature Tours • www.ventbird.com

WINGS Birding Tours Worldwide • www.wingsbirds.com



TUCSON AUDUBON FIELD TRIPS

KEN MURPHY, FIELD TRIP COORDINATOR

Tucson Audubon Field Trips Listings Are Now Online Only

For a full listing of trips and details, visit tucsonaudubon.org/fieldtrips, call the trip hotline at 520-629-0510 x4, or pick up a printout at our Nature Shops.

FEATURED FIELD TRIP

February 17—Tuesday 7:30 AM

Rio Vista Natural Resources Park

This city park combines playgrounds, a small turf area, equestrian access to the Rillito, and lots of native vegetation. This results in a good mix of bird species. We will walk around the park and the adjacent trail along the Rillito. We should see a combination of resident desert, wintering birds and some of the raptors that prowl the Rillito in the winter. It's a great place to become acquainted with Tucson's birds. Register online starting January 6 at tucsonaudubon.org/fieldtrips. Leader: Kendall Kroesen, 971-2385, kkroesen@tucsonaudubon.org.



White-crowned Sparrow

JOAN GELLATY

Weekly bird walks are listed at tucsonaudubon.org/fieldtrips

General Information Tucson Audubon field trips are offered at no charge and are led by expert volunteers. Bring money to cover your share of the carpooling and any required entry fees (e.g. for state parks). For specific information about a trip, contact the leader of that trip. Please dress appropriately for your field trip. Always wear sturdy shoes, a hat, and sun protection. Bring plenty of snacks and water for yourself. Always bring binoculars and a field guide. For most trips a scope can be useful.

Arrival Times Arrive *before* listed departure times. Trips will leave promptly at the time given.

Carpooling Sites Tucson Audubon strongly encourages carpooling, and for some trips it may be required. Check our website for frequently used carpooling sites. You are expected to reimburse the driver for the actual cost of fuel. Drivers and trip leaders are not expected to contribute.

Rare Bird Alert Listen to the latest rare bird alert at 520-629-0510 x3. Report rare birds at 520-629-0510 x3 or rarebirdalert@tucsonaudubon.org.

Birds & Business Alliance JOIN TODAY

and connect with the Tucson Audubon community

For more information and to join, contact Diana Rosenblum at drosenblum@tucsonaudubon.org or 520-209-1802.



DORIS EVANS



SCOTT OLMSTEAD



MATT GRIFFITHS

THE TAS-IFIEDS CLASSIFIED ADS

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

KLONDYKE, ARIZONA 28.5 ACRES IN PRISTINE ARAVAIPA VALLEY. Income includes Klondyke Horsehead Lodge; RV parking; and BLM rental. Manufactured home has 5 bedrooms; 2½ baths; fireplace; metal roof. Great mountain views. As many as 200 species of birds live or migrate in the valley and Aravaipa Canyon. \$375,000. 928-828-3335. <http://tour.fizber.com/home/54Z94J>

BIRDER'S PARADISE. 41 acre ranch for sale. www.sonoitacreekhome.com

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,
Phone: 520-629-0510 ext 7015

On the southeast corner of University Blvd and 5th Avenue.

AGUA CALIENTE PARK SHOP

*Thursday–Saturday, 10 AM–1:30 PM
Phone: 520-760-7881

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

From Tanque Verde Rd and Houghton, continue east on Tanque Verde 2 miles. Turn left (north) onto Soldier Trail, continue north for 2 miles. Turn right (east) onto Roger Rd, continue ¼ mile to the park entrance on the left (north).

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

Support Tucson Audubon... Become a Friend Today!

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 \$100 Contributor \$2500 Leadership Circle
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 Please do not mail me *Vermilion Flycatcher*. I'll read it online.

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Tucson Audubon's Nature Shops provide for your needs in natural history books and guides, birding optics and accessories, and gifts right here in Tucson. We offer a great selection, the best prices, and member discounts. Remember to shop locally.

Are Your Binoculars Keeping You From Enjoying Birding?

Tim Helentjaris, Nature Shop Volunteer



Leica Ultravid HD 8x32
MSRP \$2,299.00 Member \$2,198.70



Swarovski EL 8x32
MSRP \$2,443.00 Member \$2,198.70



Opticron Discovery 8x32
MSRP \$252.00 Member \$229.00

Do you have trouble holding your binoculars steady? Just too heavy to carry around any more? Are they hard to see through comfortably or do you have trouble finding the birds through them? Binoculars that might have served you well once can have characteristics that no longer suit you as you and your eyes have aged. We have a large and diverse inventory of binoculars in the Tucson Audubon Nature Shop that may alleviate some of these problems.

Some ideas to try that may make it easier for you include:

Try a more **compact pair**, such as 8x32s. These binoculars are smaller and lighter than 8x42s, making them easier to carry and hold steady, and they fit smaller faces and hands. We have them in every price range, from the Opticron Oregon at just over \$100 all the way up to the Swarovski and Leica models, with many price points in between.

If your main concern is neck pain, try a **harness** as an alternative to a neck strap. Many people find this more comfortable, putting most of the weight across the shoulders instead of all on the neck.

You might try a **different shape** of binocular that are easier to hold steady. Some folks prefer the open bridge designs as their fingers naturally wrap around the barrels. We have both Swarovski's and Vanguard's in this style. Similarly, a smaller Porro prism design, such as the Vortex Raptor, can be easier for smaller hands to hold.

Another advantage of the Raptor is their **lower magnification**, in this case, 6.5x instead of 8–10x.

Binoculars with higher magnification are innately harder to hold steady and ~7x binoculars are not only better in this regard but have wider, brighter fields of view.

Many newer binoculars have larger, **over-sized oculars** (the lens closes to your eye). They are more comfortable to use, as they make it easier for your eyes to line up and quickly see through them. The Opticron Discoverer is a good example at an affordable price.

Finally, if steadiness is your primary issue, consider **electronically-stabilized binoculars**, such as those made by Canon. The view is the same, until you push a small button on them and *voila*, the image immediately becomes rock-steady. Tucson Audubon unfortunately does not offer these for sale, but you can find them in town at Starizona. If nothing else has worked for you, give these a try.

If you're having trouble birding due to any of these issues, you don't need to suffer through it. Come in and try a fresh pair of binoculars so that you can enjoy your favorite pastime again.



Eagle Optics Ranger 8x32
MSRP \$389.95
Member \$289.99

Vortex Diamondback
8x32 MSRP \$239.00
Member \$189.99

A Holiday Gift of Poetry

Where the River Goes: The Nature Tradition in English-Language Haiku.

Edited and with an introduction by Allan Burns. Snapshot Press, 2013. 480 pages—hardcover.

If we date its omnipresence from the founding of the journal *American Haiku* in 1963, the English-language haiku and I burst onto the scene simultaneously. Thanks to the well-meaning and uncomprehending efforts of my elders in the early 1970s, I still experience a palpable anxiety when I think of such poems: Was that 5-7-5 or 7-5-7? Where does the “cutting word” fall? Am I allowed to mention the name of the season or not? Like me, an entire generation of American students grew up thinking of the haiku as a purely formal puzzle, a syllable-counting game trotted out when the English teacher could think of nothing else to occupy a bunch of bustling third-graders.

Fifty years later, Allan Burns’s new anthology opens our eyes to a poetics that is as far removed as possible from the pedantic, childish formalism imposed on us by our elementary school past. Syllable counts? Never mind. Cutting words? Dangerously close to preciosity. Explicit seasonality? Not essential to the haiku, which works not by telling or demonstrating but by suggesting, recalling, illuminating the rich whole of a phenomenon by conjuring up its most evocative parts.

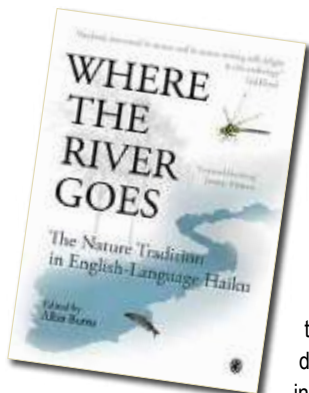
desert chill
the ocotillo’s long reach
to the stars

This poem, by the biologist, geneticist, and poet Cherie Hunter Day, “breaks” all those “rules” we learned so long ago. And yet it compresses with remarkable power an entire winter’s night into a single image as precise and evocative as it is brief. Read it, slowly, lingeringly, and see just how those three short lines move you away from the page and out into a vast, mysterious world of memory, anticipation, and fantasy.

Where the River Goes gathers together haiku by the forty most significant American, British, and Australian poets of the form writing in English over the past half century. By restricting the selection to works from “the nature tradition,” the editor—himself a distinguished poet, critic, and naturalist—emphasizes the historical origins of the classical haiku in Buddhist-tinged contemplation of the natural world.

At the same time, of course, poetry, even nature poetry, cannot exist without the poet: “Only a

human,” writes Burns, “can convert observations of the natural world into poetry,” and even those haiku in which the poetic self is most resolutely “effaced” demand that the reader ponder the relationships between the cultural and the natural, the individual and the universal.



an aging willow—
its image unsteady
in the flowing stream

Robert Spiess, an influential early haiku poet and editor, lets the human presence go unmentioned in the words of this poem, but the shift from the willow to its “image” (after what seems to me the fussy and unnecessary dash) subtly and definitively (re-) inserts the human viewer into the poem, a viewer who, like the

reader, is moved to reflect—the word is rarely more apt—on her own wavering image in a river moving inexorably on. The present absence of the human in haiku nature both unsettles the reader and obliges him to evaluate his own place in the material world around him.

Burns furnishes his anthology with an extensive introduction to the history and aesthetic of the haiku, in early modern Japan and in the modern English-speaking world. Burns compellingly traces the convergences and continuities between Buddhist(-like) thought and English poetry in the nineteenth and twentieth centuries, and thoughtfully explores the different concepts of nature that provide the background to each. He also tackles, to the benefit and relief of grade schoolers everywhere, the vexed question of definitions, concluding quite rightly that “the ‘essence’ of haiku ... remains elusive, defies rigid definition, and evolves through time—all these things are, ultimately, great aesthetic strengths.”

Those strengths are on fine display in *Where the River Goes*, an excellent introduction to this deceptively simple and richly rewarding genre for naturalists, readers, and even aspiring poets, who will find pleasure and ample inspiration in works like this one by Ruth Yarrow:

cliff cataract
braiding water, breeze and sun
winter wren’s song

A splendid evocation of one of the most remarkable sounds in nature, Yarrow’s poem serves just as well as a description of the haiku, which at its best also weaves the elements of nature into unforgettable song.

Rick Wright is a widely published author and popular tour leader in Europe and the Americas. He will be speaking at the 2015 Tucson Bird and Wildlife Festival.

Join Us at the Tucson Festival of Books



JENNIE MACFARLAND

The Tucson Audubon Nature Shop is happy to invite you to join us at this year’s Tucson Festival of the Books. This year’s festival will be held March 12 & 13 9:30 AM–5:30 PM. It is our hope to spread a love of birds and birding to our community through field guides and literature and would love for you to join us in this endeavor. We will have two booths this year, our Nature Shop booth as well as our booth in Science City where we will have live birds. Make sure to stop by both booths to get your card stamped for a chance to win a pair of new binoculars. Books and birds, what more could one ask for? 📖

Don’t forget our Nature Shop is a great place to pick up books and field guides year round.



ARIZONA WOODPECKER, GEORGE WEST

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Did you know that Tucson Audubon offers a range of specialized email updates on various topics, such as Volunteer News, Green City News, Conservation Alerts, Paton News, IBA News, Nest Boxes for Urban Birds, as well as a regular Weekly Update?

To subscribe to any of these, go to tucsonaudubon.org and click on the “Sign-up for Newsletters” button on the home page. Or you can call Diana at 520-629-0510 x7002 and she will take your details.



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For more information please visit tucsonaudubon.org/gala or contact Bété Jones at bjones@tucsonaudubon.org or 520.209.1812

ARTWORK BY MARTHA PILLE



Have you seen our rivers?

Thank you for supporting our special year-end appeal with your cash gift. Call Diana Rosenblum at 520-209-1802 or visit tucsonaudubon.org/yearend to make your tax-deductible donation today.



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