

# Vermilion

FLYCATCHER

January–March 2019 | Volume 64, Number 1





#### MISSION

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

#### TUCSON AUDUBON SOCIETY

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Tucson, AZ 85705  
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#### NATURE SHOPS

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

#### NATURE CENTERS

**Mason Center**  
3835 W Hardy Rd  
Tucson, AZ 85742  
Hours: Open most weekdays 9 am-5 pm or when chain is down

#### Paton Center for Hummingbirds

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

**VERMILION FLYCATCHER** is published quarterly. Please call 520-629-0510 for address changes or subscription issues. Submissions are due the 1st of the month, two months before issue date. Send submissions to Matt Griffiths as Microsoft Word, RTF, or plain text files.

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FRONT COVER: Montezuma Quail in winter grasslands by Alan Schmierer, a passionate birder turned passionate bird photographer.

# Let My People Go Birding

“Pat A. Gonia” is the nickname given to me by my circle of birding and outdoor adventure friends. I supposedly earned the nickname based on my usual head-to-toe attire made by the popular outdoor apparel brand, Patagonia. My “Pat” status was further cemented when I became a resident of Patagonia, Arizona, in November 2016.

Patagonia, the company, owns a long-time reputation as an environmental leader for the outdoor retail industry. In 2011, a full-page advertisement in the New York Times read, “Don’t buy this jacket”—a creative homage to Patagonia’s commitment to durable goods and sustainability. More recently, Patagonia led a movement and was eventually joined by major outdoor brands, The North Face and REI, to relocate the outdoor retail industry’s annual trade show from Utah to Colorado. The kerfuffle was due, in large part, to Patagonia’s dissatisfaction with the State of Utah’s support for rescinding Bears Ears National Monument.

In many ways, Tucson Audubon’s values as a non-profit organization are similar to those of our grantor, Patagonia. Look no further than the Mason Center to appreciate Tucson Audubon’s commitment to sustainability. The

Mason property features solar panels and the first commercial composting restroom facilities permitted in Pima County. Likewise, our organization has a long history as an advocate for the protection of public lands. For example, Tucson Audubon maintains a commitment to being a voice for the San Pedro Riparian Conservation Area, a pristine stretch of the San Pedro River near Sierra Vista.

Another principle Tucson Audubon shares with Patagonia is a commitment to hiring as many employees as possible who have a pre-existing connection to our mission. We like our employees to have an appreciation for birds, an understanding of the challenges birds are facing, and the occasional urge (and in some cases an addiction) to hitting the birding trail or enjoying their home feeding station. We believe that curating our staff in this way gives us a stronger connection to you, our members, and represents an organization-wide investment in our efforts to inspire people to enjoy and protect birds.

Patagonia’s founder, Yvon Chouinard, wrote in his book, *Let My People Go Surfing*, “If you care about having a company where employees treat work as play and regard themselves as ultimate customers for the products they

produce, then you have to be careful whom you hire, treat them right, and train them to treat other people right.” I subscribe to these principles. I’m fortunate to have inherited a core staff who regard their work as play and have bought into Tucson Audubon’s mission. We’ve been thoughtful in making recent hires, too—Keith Ashley, Development Director; Tina Hall, Paton Center Coordinator; and Sheri Siesennop, Bookkeeper. Each new employee brings with them a strong appreciation for birds and the work of Tucson Audubon.

As nicknames go, Pat A. Gonia is one I can live with. The title makes me smile when preparing for the next adventure with my friends, and the brand itself is an inspiration to my daily work at Tucson Audubon. And the next time a rare bird shows up in Southeast Arizona, I’ll proudly let my people go birding.



Best regards,

A handwritten signature in black ink, appearing to read 'J. Lutz', written over a white background.

Jonathan E. Lutz,  
Executive Director

## Will You Join Tucson Audubon Today?



**Your membership supports Tucson Audubon’s efforts in:**

- C**onservation We enable people to conserve our natural environment through on-the-ground activities.
- A**dvocacy We promote public policy and speak out for wild birds and their homes.
- R**estoration We create sustainable wild bird habitat.
- E**ngagement We help people connect with wild birds.

**Benefits include:**

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

All funds are used for local conservation efforts.

Sign up at [tucsonaudubon.org/join](https://tucsonaudubon.org/join) or call 520-209-1802.



# START PLANNING NOW FOR THE **SOUTHEAST ARIZ** AUGUST 7-11, 2019 *Registration Opens*

Enjoy a large selection of **GUIDED BIRDING AND NATURE TRIPS** every day crafted to fit every birding style and budget! Everything from overnight trips in the Chiricahuas, full-day excursions to California Gulch, and \$10 "Drive Yourself" trips to Catalina State Park.

**LEARN FROM EXPERT PHOTOGRAPHERS** in workshops (both in the classroom and in the field) that appeal to all levels of nature photographers.

Professional birders share their **BEST BIRD IDENTIFICATION TIPS** for shorebirds, raptors, sparrows, and more!

**IT'S NOT ALL BIRDS!** The unique diversity of Southeast Arizona is on display with presentations, trips, and workshops covering butterflies, reptiles, geology, history, important conservation issues, and more.

The DoubleTree by Hilton Hotel at Reid Park hosts our largest **FREE NATURE EXPO** yet with an expanded Kid's Zone, activities for all ages, and a wide array of exhibitors.

**REGISTRATION OPENS MARCH 15** and many field trips and workshops will fill up fast!

HELD AT THE DOUBLETREE BY HILTON HOTEL AT REID PARK



*Tours year-round in southeast Arizona and to select destinations worldwide*

*2019: Honduras, Hawaii, Iceland, Argentina (solar eclipse), Taiwan*

1-877-BIRDERS

[www.adventurebirding.com](http://www.adventurebirding.com)

*Find Your Life Birds*

# 9TH ANNUAL TUCSON BIRDING FESTIVAL

March 15

PRESENTED BY



## FEATURED GUESTS:

### LAURA ERICKSON



Laura has been a scientist, teacher, writer, wildlife rehabilitator, professional blogger, public speaker, photographer, and Science Editor at the Cornell Lab of Ornithology. She's written eleven books about birds, and she's currently a columnist and contributing editor for *BirdWatching* magazine. Laura has been producing "For the Birds," the longest-running radio program about birds in the United States, since 1986.

#### Plan to see Laura at one of these events:

- Wednesday, August 7 Opening Reception
- Thursday, August 8 Elegant Trogon Search Field Trip  
"Writing About Birds" Classroom Workshop
- Friday, August 9 Madera Canyon Field Trip  
Presentation: "101 Ways to Help Birds"  
Owls and Nightjars Field Trip
- Saturday, August 10 Presentation: "The Owls of Harry Potter"  
Keynote Presentation & Banquet: "Best Bird Ever"
- Sunday, August 11 Summerhaven Area Field Trip

### KEVIN KARLSON



Kevin Karlson is an accomplished birder, author, professional tour leader, and wildlife photographer/instructor. He is a regular at bird and nature festivals in North America, where he gives keynote presentations, workshops on bird identification, and photo instruction. Kevin's books include identification guides, and bird and nature photography. While officially retired, Kevin continues to lead select tours and photo workshops for his company Jaeger Tours, and for Wildside Nature Tours.

#### Plan to see Kevin at one of these events:

- Wednesday, August 7 Opening Reception
- Thursday, August 8 Raptors and Arizona Specialties Field Trip  
"Shorebirds Simplified" Classroom Workshop
- Friday, August 9 Shorebird ID Workshop (in the field)  
Keynote Presentation: "Birds of Prey"
- Saturday, August 10 Advanced Photography Workshop
- Sunday, August 11 Celebrity Bird Walk with Kevin Karlson

Gilded Flicker, Bruce Taubert



# Living with Nature Monthly Program

Our free monthly programs are designed to entertain, inform, and educate. Guest speakers present topics related to bird biology and ecology, global and regional birding hot spots, and conservation issues that affect birds, wildlife, and their habitats. Program locations are in Tucson, Green Valley, and Oro Valley. Visit [tucsonaudubon.org/lwn](http://tucsonaudubon.org/lwn) for more details.

## TUCSON—venue 1

REI Tucson

160 W Wetmore Road, Tucson, AZ 85705

Register at [rei.com/stores/tucson.html](http://rei.com/stores/tucson.html)

or call 520-887-1938

### Wednesday, January 9, 6:30 pm

#### Birding the Islands of Trinidad and Tobago

Get a taste of tropical birding in Trinidad's high mountain rain forests, sandy beaches, and mangroves—home to 482 species of birds—with Martyn Kenefick, author of *Birds of Trinidad & Tobago Field Guide* and the Chair of the Conservation & Education Committee of the Asa Wright Nature Centre. The Centre is a jumping off spot for most field trips, and is renowned for specialties including Bearded Bellbird, Tufted Coquette, and Oilbirds.



Tufted Coquette, Feroze Omardeen

## TUCSON—venue 2

Ellie Towne Flowing Wells Community Center

1660 W. Ruthrauff Road, Tucson, AZ 85705

### March 7, Thursday, 6:30 pm

#### How to Identify Birds of Prey: Raptor ID and HawkWatch Field Trip

Birds of prey can be challenging to identify. Here is an opportunity to learn some simple characteristics and a formula to help you identify these birds. This program includes stunning photography from our presenter, Stephen Vaughan, and will be followed by an optional fun field trip to the **Tubac HawkWatch** on Sunday, March 10, to test drive our new raptor ID skills.

## GREEN VALLEY

Desert Hills Social Center

2980 S Camino Del Sol

Green Valley, AZ 85622

### Saturday, January 5, 10 am

#### Getting Started with eBird—Making eBird Easy!

Tucson Audubon Conservation Bird Biologist, Jennie MacFarland, presents a popular workshop from the Southeast Arizona Birding Festival. The free online birding tool eBird is changing the face of modern birding by allowing birders to post sightings, keep life lists, manage their personal records, and use its amazing output maps and features. This workshop will cover what eBird is and why it's important that you contribute, show you what it can do for you as a birder, and teach you how to get started.

### Saturday, February 2, 10 am

#### Amazing Hummingbirds with Karen Krebbs

Karen Krebbs has been studying hummingbirds for 30 years and will share her extensive knowledge on identification, entertaining hummingbird behavior, nesting biology, and ways to attract these tiny jewels to your garden.

### Saturday, March 2, 10 am

#### Millennia of Biodiversity Crises:

#### Extinction and Conservation of Birds on Tropical Islands

David W. Steadman, visiting Curator of Ornithology at the Florida Museum of Natural History, University of Florida, will take us to remote islands to see what sorts of birds lived there when humans first arrived. On some islands, nearly all species of birds are already extinct because of direct or indirect human impact. On other islands, conservation programs still have considerable prospects for success to save the highly distinctive birds that evolved in isolation on these islands.

## ORO VALLEY

Western National Parks Association

12880 N Vistoso Village Dr

Tucson, AZ 85755

### Saturday, February 16, 12 pm

#### The Little Yard that Could

Whether a tenth of an acre or 10 acres, your yard can make a difference. By incorporating plants that provide food, protection, and nesting sites, not only will you have a beautiful landscape that is brimming with life, but you will also be helping to enhance species diversity. Presenters Jennifer Patton, landscape architect, and Ben Wilder, naturalist, will discuss basic design layout, key plant selection and placement for attracting birds and insects, and share their picks for the top five Sonoran Desert MVPs (Most Valuable Plants).



Verdin with insect on desert hackberry, Ben R. Wilder

### Saturday, March 23, 12 pm

#### Gray Hawks on the San Pedro

Ariana La Porte has been piloting a study on Gray Hawk diet and home range along a groundwater gradient in the San Pedro River Valley to assess the impact that over-pumping may have on this top predator. The overall goal of her study is to illuminate the effect of groundwater on the riparian food web. Their position as an apex predator makes Gray Hawks an ideal study species. Join us as we hear an update on field biologist Ariana La Porte's research with Sabo Lab (Arizona State University).

# Adult Education Classes

Our adult education classes are designed to help you improve your knowledge and practice your skills in some of the most beautiful locations in the region. These workshops and field trips, limited to 10 participants, will be led by Homer Hansen.

Visit [tucsonaudubon.org/education](http://tucsonaudubon.org/education) for details, comprehensive class list, and to register.

Location for these workshops is the Tucson Audubon Main Office, University and 5th Avenue, in Tucson.

Cost is \$110/members; \$145/non-members.



## Sparrow Identification Workshop

Often skulky and elusive, these “little brown jobs” are often overlooked in the field. Learn how to find and observe sparrows in their preferred habitat using foraging behaviors, flight characteristics, and vocalizations. The significance of bill shape and size, wing length, and tail length are all discussed in relation to identification. This workshop covers 34 species of sparrows, towhees, and longspurs that may be found in the southwest.

**Classroom session: Thursday, January 31, 2019; 5:30–8:30 pm**

**Field trip: Saturday, February 2, 2019; 7 am–4 pm, location to be announced**

## Raptor Identification Workshop

Though there are not many species of raptors, identification challenges arise from variations in their plumages due to age, subspecies, or color morphs. In this workshop, you will learn to recognize species apart from their plumages and the importance of wing shape and behaviors that aid in their identification. This workshop covers 28 species of raptors that can be found in the southwest.

**Classroom session: Thursday February 7, 2019; 5:30–8:30 pm**

**Field trip: Saturday, February 9, 2019; 7 am–4 pm; location to be announced**

## Introduction to Birding by Ear

Learn to use your ears as much as (if not more than) your eyes while birding your favorite destinations. This class will introduce you to the world of bird vocalizations and give you the basic framework for learning the basic components of bird song through sonograms. The field trip will give you a chance to practice recognizing and using these components in the real world. Vocalizations will be recorded and brought back to the classroom to analyze during lunch.

**Classroom session: Thursday, April 4, 2019; 5:30–8:30 pm**

**Field trip: Saturday, April 6, 2019; 6 am–1:30 pm; location to be announced**

## Advanced Techniques for Birding by Ear

Delve further into your enjoyment for birding by ear with this class. The nuances of bird vocalizations are at the forefront of this class with the goal of understanding what you are hearing in greater detail. The evening classroom session presents advanced terminology and concepts for hearing bird song, including tonal qualities, transcription techniques, and similar species comparisons. The Saturday trip will practice applying these skills in the field, and vocalizations will be recorded and analyzed.

**Classroom session: Thursday, April 11, 2019; 5:30–8:30 pm**

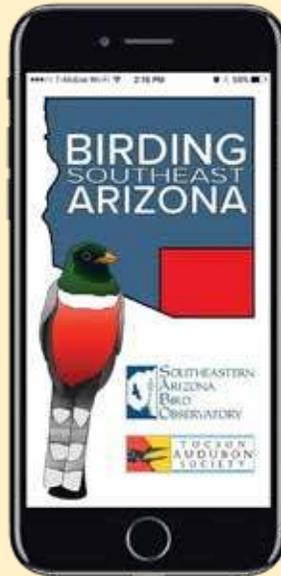
**Field trip: Saturday, April 13, 2019; 6 am–1:30 pm; location to be announced**

Song Sparrow, ©bryanjsmith; Red-tailed Hawk, Rufous morph, Muriel Neddermeyer; Lucy's Warbler singing, Lois Manowitz

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

### **BIRDING SOUTHEAST ARIZONA APP**

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



*Developed by Southeastern Arizona Bird Observatory and Tucson Audubon Society.*

**iOS or Android. Learn more at [tucsonaudubon.org/app](http://tucsonaudubon.org/app)**

## Events Calendar

### JANUARY

- 5 Living With Nature Green Valley
- 9 Living With Nature Tucson
- 15 Lobby Workshop
- 31 Sparrow Workshop (and Feb 2)

### FEBRUARY

- 2 Volunteer Appreciation BBQ
- 2 Living With Nature Green Valley
- 7 & 9 Raptor Workshop
- 13 Environmental Day at the Capitol
- 16 Living With Nature Oro Valley

### MARCH

- 2 Living With Nature Green Valley
- 5 *Water Matters More* at the Loft
- 7 Living With Nature Tucson
- 23 Living With Nature Oro Valley

### APRIL

- 4 & 6 Birding by Ear
- 11 & 13 Advanced Techniques for Birding by Ear
- 7 Birdathon Begins (through May 7)

TUCSON AUDUBON SOCIETY

# BIRDATHON 2019

EVERY BIRD COUNTS



## APRIL 7 – MAY 7

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

### What is Birdathon and how do I participate?

- Like a walk-a-thon, but instead of walking, go birding and spot as many species as possible
- Gather pledges per bird species, or simply gather donations
- Fun for everyone: kids, adults, beginners, and experts!
- Hold your Birdathon anytime from April 7 to May 7; your day can last from 1 to 24 hours.
- Join a team or lead one! Gather friends and family!
- Consider joining one of our expert-led teams.
- Prizes are awarded for a variety of categories.
- Stay tuned for details and fundraising tips in our weekly emails and on our website: [tucsonaudubon.org/birdathon](http://tucsonaudubon.org/birdathon)

# Field Trips

*Luke Safford, Field Trip Coordinator*

## Sweetwater Wetlands

*Every Wednesday (8 am in January & February;  
7 am starting in March)*

Come join us as we explore the wilds of Sweetwater Wetlands on a weekly basis. This is a great time of year to see waterfowl, wintering rarities like American Bittern, or maybe even a bobcat!

## Mason Center/Arthur Pack Park

*Every Saturday in January & February (8 am)*

We'll start with feeder-watching at the Tucson Audubon Mason Center followed by a stroll through Arthur Pack Park for perhaps 20 to 30 more species along the trails with views of the golf course pond. Walks will also continue every first and third Saturday in March–May.

## Sabino Canyon

*1st Fridays and 4th Wednesdays of the month  
through April (8 am)*

Led by Sabino Canyon Volunteer Naturalists Jean and Mark Hengesbaugh (Fridays), and Julie Michael (Wednesdays), we'll bird Sabino Canyon Recreation Area walking a loop that includes both Sonoran desert upland and Sabino Creek riparian areas. Register online.

## Mission Garden

*2nd Thursdays of the month (8 am)*

This is a good walk for beginning bird watchers, gardeners, and those interested in attracting birds to their yards. Along the way you'll see the wide variety of bird-friendly plants at the garden.

## Oracle State Park

*1st and 2nd Fridays of the month through April (8:15 am)*

Have you visited this little-known Arizona State Park near the town of Oracle? Join Mary Ellen Flynn for a guided walk around the beautiful grounds with a chance to see some higher elevation species.

## Santa Cruz Flats

*Wednesday, February 6*

We'll drive the back roads of this agricultural area looking for raptors (possibly including Crested Caracaras), sparrows, Burrowing Owls, and other species attracted to wide-open spaces. Register online.

## Tubac Hawk Watch

*Sunday, March 10*

For several years the Tubac Hawk watch has counted up to 22 species of raptors in this area during the month of March, including Common Black-Hawk, Gray Hawk, and Zone-tailed Hawk. Register online.

## Exploring New Hotspots

It is always fun checking out a new birding location and on Saturday, November 10, we were granted special permission to access Rancho Santa Cruz's 130-acre private parcel on the Santa Cruz River in Tumacacori. Who knew what we would find?! Jennie MacFarland, Richard Fray, Scott Crabtree, and Larry Norris led 44 birders through this new area and discovered an old Rose-throated Becard nest along with good numbers of wintering birds.



People birding Rancho Santa Cruz, Jennie MacFarland; Rose-throated Becard nest, Jennie MacFarland

To register, learn more info, and see more field trips, visit  
[tucsonaudubon.org/fieldtrips](http://tucsonaudubon.org/fieldtrips)

# Volunteer Spotlight Luke Safford, Volunteer Coordinator

Tucson Audubon volunteers are usually quite visible with nametags and smiles while greeting customers at our Nature Shops, leading field trips, feeding the birds at the Paton Center, or tabling at events like the SAHBA Home & Garden Show. But many volunteers work quietly behind the scenes.

I remember making a bird house in seventh grade Shop class and it took me all semester to make it look just right. I would have never thought someone could construct 250 of them in less than a month! That is exactly what “behind-the-scenes” volunteer Ray Thompson did this past October and November when he built 250 Lucy Warbler nestboxes to help further our studies of this warbler’s nesting activity. He also built Barn Owl boxes, which will head out to places like Sweetwater Wetlands to enhance nesting opportunities for these beautiful owls.

Along with Ray, the Desert Woodcrafters Club ([desertwoodcrafters.org](http://desertwoodcrafters.org)) has volunteered to make Lucy’s Warbler nestboxes for us the past couple years and they are an amazing group of partners!



Ray Thompson and Lucy’s Warbler nestboxes, Nicole Gillett



Photo by Olya Phillips

You may have heard how important it is for your volunteer hours to be recorded in our database. It is your hours that help us receive grants for new projects, gauge the importance of various activities, and also give you greater discounts in the Nature Shop! We want to make this easy for you. Super “behind-the-scenes” volunteer, Bess Wong, has been entering volunteer hours for many of you throughout the year. But we can only enter in what we know, so if you have more volunteer hours that may not have been recorded, please let us know, even if it is a rough estimate, and Bess will record them for you. Thanks, Bess, for being a super recorder!



Bess Wong

2018 recorded volunteer hours (through October):

<b>427</b> individuals volunteered at least 1 hour	<b>70</b> individuals volunteered at least 50 hours	<b>27</b> individuals volunteered at least 100 hours	<b>13,173.83</b> total recorded volunteer hours	<b>1</b> individual volunteered over <b>500</b> hours!
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If you would like to learn more about current volunteer opportunities and to start volunteering with Tucson Audubon, please email Luke Safford at [lsafford@tucsonaudubon.org](mailto:lsafford@tucsonaudubon.org).

## Welcome New Members

Jan & Ken Absher, Joanne & Chris Aeschliman, Fariba Alipour, Anne & Andrew Anderson, Gary Batka, Kathleen Baynes & Joel Deckler, Mike Bettencourt, Sanford Bolinger, Matt Borlick, Suzy & Peter Bourque, Maureen Brooks, Owen Brosanders, Tom Brown, Joan Bruchman, Fred Bryant, Herbert Byaruhanga, Kristin Carrico, Peg Cass, Tom Chartrand, Dianne & Patrick Clancy, Christina Clark, Emily & Neil Clark, John Claudy, Mary Ann Clayton, Claudia & Mack Consigny, Judith Cooper, Susan & Richard Cover, Jean & Derek Coward, Hilary Cox, Beth & Fred Craigie, Joan Fitzgarrald & Pete Cunningham, Elizabeth Daigle, Mary Sue Dallas, Sue & Richard Darling, Sue & Murray DeArmond, Nancy DeBenedictis, Linda Dorosh & Chuck Gremel, Cathy & Rick Eells, Mima & Don Falk, Shirley Fasching, Mary Bente & Marcia Frye, Nancy Rudd & Robert Gold, Marcia Grand, Debra Hills, Sara Perotti & Todd Hixon, James Hoagland, Lawrence Hollar, Deborah Holmes, Linda Horne, Peggy Hughes & Pat Barey, Lucy Hyatt, Richard Hyde, Elisabeth Jaquette, Mary & Douglas Johnson, Kathy Johnson, Irene Klar, Holly & George Kleindienst, Darla Knauss, Beth & Al Koss, Cynthia & Jim Krakowski, Judith & Donald Kramer, Melissa Kubai, Jim Lacoss, Kathy & Joe LaTourrette, Marcy & Mike Lewis, John Liggins, Kathy & John Lorec, Mary Anne Lower, Jane & Dean Lucal, Thomas Magee, Brent Mahan, Chelsea Mahnk, Wendell Maize, Anne Maley-Schaffner & Timothy Schaffner, Dan Mariani, Marilyn McEvoy, Mary Melcher, Jerry Meshulam, Jane Miller, Sharon & Bill Mitchell, Telsa Mittelmeier, Anne Moffat & Wiliam Masters, Todd Mohlmann, Henry Montuño, Aeyoung Mook, Donna Moore, Josephine Lai & Francis Morgan, Greg Nelson, Robert Orenstein, William Owen, Catherine Dunn & Thaddeus Paprocki, Taylor Parra, Grace & George Pollard, Georgia Pope, Katie Porter, Don Reiser, Jerri Roberts, Megha Roezealia Morganfield, Dianne Rogers & Walter Leffek, Sharon Rollins, Nancy Ruppenthal, Joyce Saler, Kate Scott, Mary Scott, Judy Seeley, Sue Sherrick & Miles Green, Sue Shetter, Catherine & Thomas Shumard, Sheri Siesennop, Charlene Sigala, Karen & Daniel Smith, Nancy Abrams & Tim Smith, Susan & Dave Sproul, Tina & Dennis St. Germaine, Craig Storie, Sylvia Strauss-Kolb, Jan Swarm, Melanie Tait & Steve Hanson, Indigo Taylor-Noguera, Jaye Thorinson, Carlota Thorne, Tina Hall & Bruce Ventura, Lesley Wade, Paula Weis, Deborah Wyckoff, John Zadrozny

## Frequent Flyers

Craig Anderson, Keith Ashley, Susan Atkisson, Melanie Builder, Shawn Burke, Carianne Campbell, Becca Carroll, Cheri Chamberlain, Karen Chandler, Janet Cohn, Christopher Cokinos, Christine Curtis, Sandy Elers, Jake Elkins, Kimberly Fitzpatrick, Peggy Ford, Judy Heffner, John Henry King, Bob King, Titus King, Susan Kozacek, Suzanne Long, Marcia OBara, Erin Olmstead, Lorel Picciurro, Jean Rios, Jeff Schlegel, Mike Sotak, Kate Stewart, Deb Vath, Nancy Young Wright

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

## Gifts in Honor or Memory Of

To Wayne Collins from Ellen Blackstone  
 In honor of Robert MacLean from Irene & Edward Moon  
 In honor of Rosemary Rawson from Linda & Michael Rawson  
 In honor of Susan Rawson from Linda & Michael Rawson  
 In honor of Virginia & Ken Lopez from Norman Lopez  
 In memory of Cydney Loggins from Debra Glessner  
 In memory of Cydney Loggins from Cynthia Ricker & Jim Handy  
 In memory of Robert Tweit from James Fett  
 In memory of Richard H. Flower from an anonymous donor  
 In memory of Ed Kutac from Penny Fish

## Remembrances

### BOB TWEIT



After retiring, Bob and his wife Joan settled in Tucson and volunteered at Saguaro National Monument and Tucson Audubon, leading bird trips and interpretive programs. Bob served as Tucson Audubon Board President, and he and Joan established the chapter library in 1982.

Bob was deeply involved with Western Bird Banders Association and served as the editor for the journal *North American Bird Bander*. He published several papers on the distribution of urban birds from his banding data, and also authored or co-authored species accounts for Abert's Towhee, Curved-Billed Thrasher, Cassin's Kingbird, and others for the prestigious Birds of North America series.

"Bob and his wife Joan were great gifts to Tucson Audubon, not just through his service as President, which was very much a joint venture for them, but also their devotion to whatever jobs they identified as needing doing and then took on, with much skill and a great deal of hard work. Many days they could both be found in the chapter's library, reviewing boxes of donated books. Bob was a devoted volunteer who gave much of his time and energy for the good of Tucson Audubon."

—Ruth Russell, former Tucson Audubon Board President

### DR. E. LINWOOD SMITH



Lin, to family and friends, loved learning about the natural world and sharing that information with others. He was one of the premier consulting biologists in the Southwest, studying potential effects of many developments on sensitive species. Lin was deeply involved in the Sonoran Desert Conservation Plan in Pima County, where he served on the Science Commission. One of Lin's great pleasures was teaching ecology at Tucson Audubon's Institute of Desert Ecology for over forty years. He opened people's eyes and minds to many wonders. His students were mesmerized.

"Lin opened people's eyes and minds to many wonders" is certainly true. At the Institute he showed us how to use a small mirror on a stick to look into birds' nests."

—Mary Walker, Tucson Audubon Board President

# Species Focus: Chestnut-collared Longspurs in Southeast Arizona

Jennie MacFarland, Bird Conservation Biologist

Two of Arizona's 48 Important Bird Areas (IBAs) center on native grassland and both have qualified for Global IBA status due to significant populations of wintering Chestnut-collared Longspurs. Both San Rafael Grasslands IBA and Las Cienegas IBA are mainly comprised of excellent Chihuahuan grassland habitat that has abundant summer breeders such as Botteri's and Cassin's Sparrows and is vital habitat for many species during the winter months. Tucson Audubon has led volunteer birders on annual group surveys of San Rafael Grasslands since 2010 and Las Cienegas since 2015.



Chestnut-collared Longspurs, Alan Schmierer

Chestnut-collared Longspur is a charismatic grassland bird that has declined by more than 87% since 1966, with an estimated 33% decline within 2003–2015. It has been listed as Near Threatened since 2004 on the International Union for Conservation of Nature (IUCN) Red List and this year was elevated to Vulnerable status, which is one step below Endangered. Chestnut-collared Longspurs nest in the Great Plains in north central US and winter in short grass prairie and desert grassland in the American Southwest and north-central Mexico. The species' dramatic decline is largely due to habitat loss, on both its breeding and wintering grounds. Much of the prairie it needs for nesting has been converted to croplands and urban areas, or has been otherwise fragmented by activities such as fracking, making what habitat remains less suitable. Essential wintering areas have also deteriorated, especially in Mexico where many formerly suitable wintering grasslands have been converted to irrigated agriculture. IUCN predicts that a decline in this species' population will continue into the future. National Audubon's large scale climate change and associated habitat change prediction model shows likely additional pressure in the future with a decrease in suitable breeding and wintering habitat.



Chestnut-collared Longspurs in Davis Pasture, Richard Fray

Tucson Audubon staff and volunteers will continue to monitor both San Rafael Grasslands IBA and Las Cienegas IBA, and as of 2017 we have increased the number of coordinated group surveys to a minimum of two each winter. Tucson Audubon is testing some different survey strategies to increase our understanding of how southeast Arizona's grasslands are utilized by Chestnut-collared Longspurs. This winter we will be placing Wildlife Acoustics SM4 recorders, and possibly wildlife camera traps, near cattle tanks in Las Cienegas to gather information on how frequently flocks of Chestnut-collared Longspurs come in to drink. We will also be gathering information about the tanks themselves, to try to determine what features the most visited tanks have in common. The longer term goal would be recommendations to land owners and land managers on how to make tanks or ponds more useful to wintering longspur flocks.

Tucson Audubon's winter surveys will include a vegetation component from now on. Surveyors will be recording the presence of non-native grasses such as Lehman's Lovegrass as well as the abundance and diversity of native grasses. Over time we will assess if there is a correlation between grass species, presence of shrubs, etc., with the goal of making informed management recommendations.

No other group of species in North America has shown a steeper or more consistent decline in their populations over the last 25 years than grassland-associated birds. The Arizona IBA program is expanding its survey efforts to identify and help protect critical wintering areas and draw more attention to these imperiled species. Thanks to the many volunteers who make these surveys possible.



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

# What our birds are up to January through March Matt Griffiths

Our first major cold front of the season has just moved through Arizona and it feels like winter! A couple of Rough-legged Hawks are wowing birders in the Sonoita grasslands and Chestnut-collared Longspurs are showing up in the same area. Winter birding is off to a great start.

Many of our winter birds arrived in the past two months and most of them will be here through this time period of January to March. Sandhill Cranes, grassland sparrows, waterfowl, and raptors are still good “gets” through early March.

Enjoy these birds while you can. When March rolls around, change will already be in the air as duck and crane numbers drop, migrants such as Lazuli Bunting and Wilson’s Warbler are coming through, hummingbird numbers increase, and Turkey Vultures return and ride the thermals of our windy spring days.

## HIGHLIGHTS FOR THE SEASON



### Specialties in the Santa Cruz Flats

The agricultural fields and low desert of northwest Marana, collectively known as the Santa Cruz Flats, is a great place to spend a winter day of birding. A good diversity of habitats and proximity to the Santa Cruz River “delta” creates the chance of seeing a variety of birds that is unrivaled in southeast Arizona. Raptors such as Ferruginous Hawk and Crested Caracara are found around farm fields, which also hold Mountain Plover in most years and a Sprague’s Pipit every now and then. The saltbush flats nearby is the only local spot to find Sagebrush Sparrow and, if you travel a bit farther south into Avra Valley, you may turn up a Bendire’s Thrasher. In recent years, active and retired farm houses have become odd locations for some incredible birds such as Ruddy Ground-Dove, Rufous-backed Robin, Black-throated Blue Warbler, and Lewis’s Woodpecker.



### Tubac Hawk Watch

One of the great wildlife events of southeast Arizona is a morning spent along the Santa Cruz River in Tubac watching scores of raptors make their way north on migration. Bring a chair to Ron Morris Park and help the crowd spot Swainson’s, Gray, Red-tailed, and Common Black Hawks in addition to Crested Caracaras, Golden Eagles, vultures, and falcons. The daily shows shepherded by Peter Collins start up in early March and usually last a few weeks until the flow of birds slows to a trickle.



### Thrasher Hotspot

If you’re feeling adventurous and in need of a little road trip, head up the freeway a bit to the “Thrasher Spot” west of Phoenix at Baseline Rd. and Salome HWY and give yourself a chance at a five-thrasher day. Unbelievably, this unassuming area is the perfect storm of habitats to find LeConte’s, Bendire’s, Curve-billed, Sage, and Crissal Thrashers! This is a great area to see the same species as at the Santa Cruz Flats with the bonus of both Bell’s and Sagebrush Sparrows occurring together to allow good comparison opportunities.

Mountain Plover, ©bryanjsmith; Tubac Bridge Hawk Watch; Sage Thrasher, Joan Gellatly

TUCSON AUDUBON'S  
PATON CENTER *for* HUMMINGBIRDS  
CAPITAL CAMPAIGN



Violet-crowned Hummingbird, Jonathan Lutz



Viewing Pavilion completed 2018, Logan Havens

## *Almost There...*

Wally and Marion Paton's simple act of kindness in the 1970s—opening their backyard to thousands of birders—turned their private property into a globally-known birding hotspot. In 2017 Tucson Audubon launched a capital campaign to replace the crumbling Paton home with an energy-efficient and bird-friendly multi-purpose center.

\$400K of our \$450K goal has been raised, and now a generous donor is offering a one-to-one match to land that last \$50K.

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

**Help preserve the Paton Legacy.  
Donate today.**

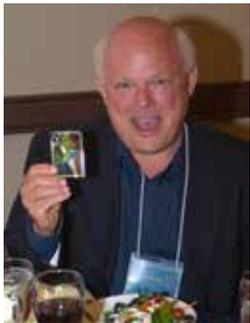
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# VISITING BIRDMAN AND LOCAL BIRDPEOPLE CELEBRATE at 10th Annual *FLY!* Gala



At Tucson Audubon's 10th Annual Gala, Guest Speaker Noah Strycker shared inspiring details of his world-record-breaking 2015 Big Year, during which he saw more than half of the world's bird species. The self-proclaimed "Birdman" also shared that the most meaningful piece of his adventure was meeting local bird lovers everywhere he traveled around the globe. This was a fitting reflection as his talk was shared with 230 of our local "Birdpeople"—from corporate and small business sponsors to Tucson Audubon donors, members, volunteers, staff, and local bird-guides.



Guests gathered not only to enjoy Noah's company, but also to spend time with each other, celebrating local birds and the work of their own Audubon chapter. Executive Director Jonathan Lutz shared a few words of gratitude to everyone for helping fulfill the Tucson Audubon mission. A spirited live auction featured six exclusive packages of mission-related adventures: from birding with local expert guides and enjoying lodging in southeast Arizona birding hotspots to a special natural-history tour of Tumamoc Hill.



Combined proceeds of the wine raffle, live auction, table sponsorships, and generous donations from supporters resulted in more than \$16,000 profit for Tucson Audubon general operations.

Over the course of his stay in Tucson, Noah had a chance to meet quite a few of our local "Birdpeople" including more than twenty university students gathered by the School of Natural Resources and the Environment and a small group of youth birders (with their parents in tow) hosted at the home of Gala Chair Kimberlyn Drew. On his final morning in Tucson, the Birdman himself was treated to a life bird, Baird's Sparrow, spotted on a quick trip to the Sonoita-area grasslands, facilitated by Kimberlyn's husband, Andy Moore.

Artwork © Charley Harper Art Studio; Noah's Baird's Sparrow, Noah Strycker; Young birder dinner, Glenda Voyles; Wine raffle winner Rob Turner, Stephen Vaughan; Noah with Susan Carroll and Ari Bose, Stephen Vaughan; Party, Stephen Vaughan

# Lucy's Warbler Nestbox Project: A Success Story

Olya Phillips, Citizen Science Coordinator

Lucy's Warblers are tiny gray birds that often go unnoticed. They're shy and not very flashy, but in fact, they are quite special. Lucy's Warblers are the only cavity nesting warblers in Arizona and the only ones that nest in low elevation Sonoran desert. Moreover, few other birds are as closely tied to a single tree species as Lucy's Warblers are to mesquites. Used for foraging and nesting, native mesquite trees are prime real estate to these birds. The declining number of mesquite bosques has left Lucy's Warblers a vulnerable species in need of a conservation plan that works. They are a secondary cavity nester, which means that they cannot excavate their own cavity; instead, they rely on other birds and natural occurrences to create them. Very little is actually known about their biology. In fact, there is a long-held belief that Lucy's Warblers, unlike other cavity nesting birds, do not use nestboxes. However, Tucson Audubon Society has received multiple reports of Lucy's Warblers using small decorative bird houses in residential areas. Thus we began a project to determine what type of nestbox Lucy's Warblers prefer the most.

In 2017, with funding from Utah's Tracy Aviary, as well as private donations, we created boxes of five different shapes and installed them at three different locations with 20 sites each: Tanque Verde Wash in Tucson, 7B Ranch Trail in Mammoth, and de Anza trail in

Tubac. Each box was installed in the same conditions (same tree, height, and direction) with order varied randomly to know that Lucy's are going for a specific design box and not its placement on the tree. Only 5% of boxes ended up with a nest, but important research that year has helped create new designs, one of which became a clear winner at the end of 2018. During breeding season, Tucson Audubon staff and volunteers located active Lucy's Warbler nests in natural cavities then came back once the nests were no longer in use to measure and photograph their characteristics. One thing that stood out the most was the apparent preference of two points of exit in the natural nests located in peeling bark of mature mesquite trees. This apparent preference potentially provides good ventilation in a hot climate as well as the ability of a Lucy's Warbler mother to sit on the eggs and look out to each side. With this information, we set out to create triangle nestboxes of two sizes as well as a PVC pipe nestbox, all with two points of exit, then added them to our existing experimental setups. With the help of numerous volunteers and staff who built, installed, and monitored these boxes, we have collected a lot of valuable data.

In 2018, a total of 62% (37 out of 60) of the experimental sites had a Lucy's Warbler nest. With each field site having 20 locations, we had 14 nests in the Tanque Verde Wash, 16 on the 7B Ranch Trail,





An experimental point along the Anza Trail in Tubac, Olya Phillips

and 7 on the Anza Trail. In addition to the experimental locations, we've had over 250 participants from the public install boxes in their own yards, creating a community of citizen scientists. We estimate that over 200 Lucy's Warbler young have fledged from our boxes in 2018 alone. A whopping 71% of the experimental boxes used were either a small or a large triangle. A clear winner, the triangle box is a success.

**Fun Fact!** During our project monitoring, we have encountered a few non-avian species using our boxes. As you can imagine, pristine small boxes are hard to pass up if you're a tiny creature looking to escape the elements. We've had pocket mice, crab spiders, and a few cold tree lizards use some of our fully enclosed boxes. None of these presented a challenge, as most moved into unoccupied boxes long after the warblers had migrated south for the winter, but that is why monitoring nestboxes is so important.

**So what's next?** We will continue our project to gather more data and eventually publish our findings to contribute to the scientific knowledge about this species. We are planning on expanding our project to more locations in southeast Arizona and beyond, turning stands of young mesquites into suitable nesting habitats with the help of nestboxes. Our additional conservation plan for this species

includes study of their foraging preferences between native and non-native mesquite trees.

We live in the center of the Lucy's breeding range, so there is no better place to study their nesting behavior. We want to see a Lucy's Warbler nestbox in every eligible yard. So far, Arizona residents have installed them as far north as Payson and as far south as Sierra Vista.

Do you have mesquite trees in or around your yard? Pick up a Lucy's Warbler nestbox from our Nature Shop or donate to our cause to help us continue our study.

If you are already involved in this project in any way, thank you! You make it possible to have a big citizen science effort that yields such significant results.

For more information contact Olya Phillips:  
[ophillips@tucsonaudubon.org](mailto:ophillips@tucsonaudubon.org)

Lucy's Warbler eggs at Anza Trail, Olya Phillips; Lucy's Warbler chicks in triangle box, Celeste Andresen; Nestboxes in front of the shop, Jennie MacFarland; Olya Phillips and Matt Griffiths hanging a nestbox, Dan Weisz; Sabino Canyon Dam Riparian Lucy's Warbler nest, Mark Hengesbaugh; Lucy's Warbler in Tanque Verde Wash; Olya Phillips



# Rick Applegate & Bess Wong

Rick and Bess are model examples of how to create a bird- and wildlife-friendly habitat. They have welcomed Tucson Audubon (and others) into their home to exhibit what is possible through our Habitat at Home program. Their unbound generosity with their time, the desire to educate others around them, as well as their super-birdy yard is why we chose to share their story.

“ We bought our townhome in the Catalina Foothills in January 2018 within a short walk of Fini's Landing and the DeGrazia Gallery in the Sun, and decided to go all in with making our new home as sustainable as possible: replacing five dozen light bulbs with LEDs; bringing in new glass and insulation; installing an efficient HVAC system, with 10kw of solar on the way; and soon, hooking up an outdoor shower and washer for graywater use. We installed three rainwater tanks with a capacity of 3,200 gallons in the back yard that were craned 90 feet over the house from the street. During our road trip, Tucson was one of our favorite birding spots and when we finally settled here, we learned about the Tucson Audubon Habitat At Home program and signed up.



The Audubon team wrote up the plan, which really kick-started our thinking about water conservation. The house had some nice outdoor space, but was not bird or wildlife friendly. We removed some eight TONS of heat-sinking red gravel, concrete, brick, and tile—all hauled one wheelbarrow at a time over six days straight through our living room. Dust? Lots of it. We also removed a pile of exotic plants and sorted through preferred natives, learning as we went about soils, the differences between succulents and cacti, and the rich traditions of the diverse cultures that were a large part of our decision to put down roots here.

Bess is always up for a chance to catch a bird with her lens—the smaller the better, the flittier the more challenging. Our Habitat At Home project has already brought in scores of birds to our back yard, and just poking her head out back, not knowing what might show up, is plenty enough for her to be entertained. It is why we're here.



Even though we are still in the construction phase, there are times in the emerging light of morning when we feel as if half the birds in Tucson are packed into our small backyard. But then the Cooper's Hawk strafes through and we are left to look at a hastily abandoned cover of mulch. Not a bird. Not a sound. Well, occasionally a left-over House Sparrow, but you have to wonder what he is thinking.

As we look back on our first year here and our experience with Tucson Audubon, we are delighted we hooked up with Jonathan, Andy, Kari, Rodd and Dan. They know what they are doing. They have an artistic and ecological eye for layout. They put it to ground. And they absorb curve balls like our festering interest in a rescue desert tortoise for the back corner and another native plant to add to the yard. Bottom line: Nobody does it better.

— Rick Applegate

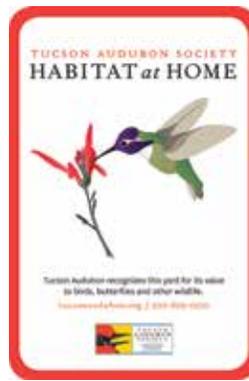
When we started reading through Rick and Bess’s property evaluation and plan, the first thing we saw was, “Whatever is best ecologically for creating a multi-species bird habitat.” On a recent visit to their home I decided to create a species list simply because I was curious about how many species I could get and partly to brush up on my backyard birding skills. In my half-hour backyard birding adventure I had accrued 16 species. It was very apparent that the goal had been met. Costa’s Hummingbirds zip inches from your face, Verdins quaintly drink nectar from the hummingbird feeders, scores of finches attach to thistle feeders, while butterflies and bees pay visits to the blooming flowers.

More than 200 native shrubs, trees, and cacti were planted by our restoration crew, most of which took place during the hottest part of the summer. Species planted include desert, pineleaf, and

butterfly milkweed for Bess’s desired butterfly habitat. The desert marigold, trailing dalea, dogweed, and blackfoot daisy spread, creating a yellow, purple, and white blanket atop the woodchip floor. Fairy duster, common sotol, ocotillo, native grasses, hopseed bush, fishhook barrel cacti, and saguaro are strategically placed to create depth as well as providing diverse vegetative structures for birds to roost, nest, and forage.

From our initial visits to now, Rick and Bess’ yard has been transformed from an unproductive space void of blooms and wildlife into a beneficial habitat and a bustling pit stop for hungry birds and pollinators.

For more information about Habitat at Home, please visit [tucsonaudubon.org/habitat](http://tucsonaudubon.org/habitat) or email [habitat@tucsonaudubon.org](mailto:habitat@tucsonaudubon.org).



Previous page left to right: Rick and Bess’ current backyard; large atrium in front of the dining room table. Above left to right: small water cistern in front yard, young native plants in large atrium, Habitat at Home yard sign, backyard view showing two of the large cisterns craned in.

## Habitat at Home Plant Profile: Brittlebush

Lynn Hassler, Nature Shop Garden Volunteer Captain

**Scientific name:** *Encelia farinosa*

**Family:** Asteraceae (Sunflower)

**Native range:** Southwestern Utah, southern Nevada, southern and western Arizona, southern California, Baja California, Sonora and Sinaloa, Mexico, to 3000’ in elevation.

**Wildlife value:** Flowers attract butterflies and other pollinators; scores of birds and desert animals relish the plentiful seeds.

If I had one plant to select to feed my seed-eating birds and mammals, it would be brittlebush! This native shrub with its silvery green leaves and masses of yellow daisylike flowers is one of the best seed producers around. Stands of brittlebush can become masses of gold on desert hillsides in winter

and spring and also look stunning when planted against a sunny backyard wall. Flowers are followed by copious amounts of seed, providing fodder for birds and many animals. The abundance of seeds not only feeds the critters but there’s plenty left over for reseeding, necessary because brittlebush is a short-lived perennial.

The genus *Encelia* is named after Christopher Encel, a 16th century botanist, and *farinosa* is Latin for “a mealy or powdery surface,” a reference to the leaves, which are densely covered with white hairs. The Spanish name, “incienso,” refers to the resin exuded by the stems, used as incense by Spanish priests. Native Americans reportedly chewed the resin for pain relief.



Provide good drainage and place in full sun so plants can achieve their ideal dense form—mounding to 3–4 feet high and wide. Plants are generally evergreen, though drop some leaves during severe cold or drought. Brittlebush grows moderately fast and is a low water user, but looks best if watered occasionally during the summer. Plants are half hardy—stem damage occurs at the mid-20s. Prune nearly to the ground to rejuvenate.

# The Trouble With Boxes

Chris Benesh

In many ways biology is an imperfect science. Our efforts to understand the living world around us has had us working hard to name and categorize the organisms that share our planet for as long as we have been recording our observations. From Linnaeus to Darwin and on to the modern day, we have been redefining what it means to be a species, and searching for a best practice for categorizing them.

Linnaeus's system of binomial nomenclature gave us a foundation for how to name things as well as providing for a trinomial to describe finer differences at the subspecies level. This did not always get us closer to figuring out what exactly we were defining, however, and early efforts were often widely off from currently held views. Sometimes species limits seem clear and easily recognized, but more often, species limits remain somewhat muddled. This is the result of our trying to make sense of things by freezing the fluid process of evolution, and making definitions based on these snapshots.



Bell's or Sagebrush Sparrow? You make the call. Lois Manowitz

We tend to think of species as boxes, or in a birding context, checkboxes. The problem is bad enough for defining species, but is often even worse when one begins to consider subspecies. Whereas taxonomists in the mid-20th century were defining species using the notion of reproductive isolation, the description of subspecies was far less well defined, with many being described

from small sample sizes using the most subtle of character differences to define them. Because of this, ornithologists in the 1940s began to look at subspecies with the yardstick of considering them valid if seventy-five percent of the individuals in a population could be differentiated from other populations. Applying this somewhat arbitrary strategy to describe subspecies resulted in a big reduction in the number of subspecies considered valid.

It is helpful to reflect on what this means to the everyday birder out identifying birds. Spending enough time studying larger white-headed gulls, Bell's and Sagebrush sparrows, flickers, sapsuckers, or Pheucticus grosbeaks is bound to make your head spin. All too often they simply don't fit into the "boxes" we have defined for them. If seventy-five percent is a reasonable benchmark for defining a subspecies, potentially twenty-five percent of a population might not be readily distinguishable.

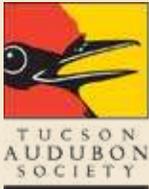
What accounts for this? Well, to some degree, it has more to do with individual variation. This can come about through different means. In many cases it may be the result of gene flow between populations, intergradation in the case of subspecies, and hybridization in the case of species. Other non-genetic influences affecting appearance include individual heath and diet, or exposure to light and wind, etc. Appreciating variation in a species is one of the more challenging skills to acquire, coming principally through experience.

Even the best field guides can only begin to tackle the topic, often providing the reader with a "classic or typical" illustration, or perhaps a couple of examples. Representations of subspecies in field guides is also imperfect as they are quite often incomplete, inviting the reader to misidentify individuals to the wrong subspecies. Species you know well will always seem more variable than those you know poorly. As an example, to the western shorebirder, Western Sandpipers will exhibit huge variation, while most of the rarer *Calidris* stints picked out in the flocks will be "classic" individuals. Do these rarities all look the same? No, but the non-classic ones are more likely to be overlooked since we lack the cumulative experience to appreciate their variation.

The take-home message in this rambling is that it is not always going to be possible to tell similar looking species and subspecies apart, however much we might wish to!

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



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

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#### UGANDA—BIRDS & GORILLAS

Dates: June 11–29, 2019

Price: \$9200

Leader: Daniel Danckwerts

Our 19-day Uganda Birds & Gorillas tour showcases the country's most famous and productive sites, with special focus on four of its core rainforest sites. Over 500 bird species and a diverse array of iconic mammals can be expected on this unbeatable tour—including a chance to spend time with Mountain Gorilla!

#### INDONESIA—WESTERN HIGHLIGHTS: GREATER SUNDAS & DRAGONS

Dates: July 15–28, 2019

Price: \$4850

Leaders: Glen Valentine

Indonesia, spread across 17,508 islands and boasting over 1,600 bird species and nearly 400 endemics (more than any other nation in the world), cannot be ignored by the international birder! On this tour, we spend time in the west as we search for the astonishing array of bird species possible here.

### Adventure Birding Company

[adventurebirding.com](http://adventurebirding.com)

#### HAWAI'I—A TRUE BIRDING VACATION

Dates: March 15–25, 2019

Price: \$5995

Leaders: Mandy Talpas & John Yerger

The birds in Hawaii are almost as fun to say as they are to see: Oahu Amakihi, Kauai Elepaio, Apapane, Palila, Omao, Akepa and 'iwi. Don't worry, they'll roll right off your tongue after a few days! Stunning scenery, endemic honeycreepers, and tropical seabirding—all without sacrificing creature comforts.

#### ARGENTINA—SOLAR ECLIPSE & BIRDING

Dates: June 28–July 10, 2019

Price: \$5995

Leaders: Mario Mosqueira and John Yerger

While this tour revolves around a total solar eclipse, within its orbit lies the wine country of Mendoza, the towering Aconcagua, vast marshland at Esteros del Iberá, and the raw power of Iguazú Falls. Birds may include Greater and Lesser Rhea, Elegant Crested-Tinamou, Southern Screamer, Torrent Duck, Andean Condor, Giant Hummingbird, Burrowing Parakeet, Strange-tailed Tyrant, and Plush-crested Jay.

### Solipaso Tours

[solipaso.com](http://solipaso.com)

#### TRINIDAD AND TOBAGO

Dates: June 17–26, 2019

Price: \$4100

Leader: David Hursh (and local guide)

Birding on this tropical, two island nation is a great way to see both South American and Caribbean birds including highlights such as the endemic Piping Guan and Trinidad Motmot, Scarlet Ibis, Rufous-vented Chacalaca, Tufted Coquette, Speckled Tanager, Oilbird, Collared Trogon, and so many more! Along with birding in many different habitats, we enjoy a stay at the wonderful Asa Wright Nature Centre where the veranda birding is world class! Other highlights include staying in Grande Riviere during Leatherback Turtle egg-laying season and Bluewaters Inn in Tobago to see the nesting colony of Red-billed Tropicbirds.

#### BAJA BIRDS AND WINE

Dates: October 17–23, 2019

Price: \$2850

Leader: David MacKay

This fun trip is a winning combination of birds, fine Mexican wines, gourmet food, and the rugged beauty of northern Baja! The Valle de Guadalupe wine country is becoming well-known for its high quality wines and is also on the cutting edge of innovative gourmet cuisine in Mexico. We visit the wine region, Ensenada, the valley of Ojos Negro, Bahia de San Quintin, and San Pedro Martir, starting and ending in San Diego. Birds of interest are Gray and California Thrasher, Clark's Nutcracker, and Black Oystercatcher.



Plush-crested Jay, Brian Henderson

# Conservation News

## Birds and the Border *Nicole Gillett, Conservation Advocate*

Birds and wildlife are facing ever-increasing threats as new barriers are erected and protections eroded on the U.S.–Mexico border.

Southeast Arizona is an excellent destination for birding largely due to our special location as a confluence for different migratory pathways. As birders, we are treated to tropical species from the South and wintering species from the North. These long-traveling birds do not recognize human borders and are protected under the Migratory Bird Treaty Act, which we have covered in past issues. Our resident or migrants with more localized travel patterns have ranges that are more determined by ecological boundaries such as the Sonoran Desert or Madrean Archipelago, which extend across the United States and Mexico. Borders that delineate our political boundaries mean little or nothing to our bird and wildlife species, but they have been ever increasingly impacted by our decisions at the border.

### ENVIRONMENTAL CONSEQUENCES OF BORDERS

Our deserts and Sky Islands in southeast Arizona provide homes to over 7,000 species; over half of the birds found on the continent can be found here, and we have more endemic plant species than anywhere else in North America. Our system of protected lands and award-winning conservation partnerships, solidify our commitment to protecting the unique landscapes that we inhabit. And our commitment has not stopped at the U.S.–Mexico border. Arizona and Sonora have long worked together to foster both human and environmental ties. As our ecosystems do not simply pause at our border, it is essential that our cross-border work continues.

As desert residents, we know that water largely determines where life can thrive. Therefore, many of our resident bird and wildlife species follow the water, which can mean traveling long distances to find suitable habitat. Imagine you are a traversing jaguar, moving across the desert to find water and food. Any barrier in your path will cost you time and energy. Habitat fragmentation is one of the largest environmental consequences of border hardening. Much of the border (35%) is already fenced, and increasing and further hardening that border will only fragment these critical habitats even more.

While some animals can pass through semi-permeable fences, many can or will not, such as Sonoran pronghorn. And with a federal push to

build new stretches of border walls, concerns over permeability and fragmentation are only worsened. The endangered Ferruginous Pygmy-Owls will not fly high enough to cross this border and, along with many other species, will avoid large open areas without any vegetative cover. Picture large walls and the barren earth that surrounds them, and you will not see a bird-friendly landscape.

Along with concerns over habitat fragmentation, the border itself presents many threats to birds. Bright lights can alter bird migration pathways and increase collisions with things in their paths. Noises, roads, and other disruptive human behavior degrade the land around the wall and further shrink available habitat.

While we have the environmental protections in place to defend most of our migratory and threatened or engaged species, border wall construction presents yet another threat to species by bulldozing right through these existing protections.

### ENVIRONMENTAL PROTECTIONS AND THE BORDER WALL

In 2005 Congress passed a law called the REAL ID Act. This sweeping act grants the Secretary of Homeland Security the authority to waive local, state, and federal laws that could interfere with national security infrastructure on the U.S.–Mexico border. These laws include the Endangered Species Act, the Migratory Bird Treaty Act, and the Wilderness Act. These laws are our strongest tools to protect the rich biodiversity and irreplaceable habitat, the cornerstones of bird and wildlife conservation. To ignore these is to ignore democracy and the long history of community and political collaboration that has been invested in environmental protections.

There are several examples of where this has occurred and where it is happening right now. Since 2005, the Department of Homeland Security has issued eight waivers in all four U.S. border states.

In California, at Smuggler's Gulch, the REAL ID Act has been used to waive the Endangered Species Act, Clean Air Act, and Migratory Bird Treaty Act to fill canyons, affecting not only the gulch, but also the



New wall, Buenos Aires National Wildlife Refuge; Javelina and the Wall, near SPRNCA; Lower Rio Grande at Monterrey Banco; photos by Matt Clark, Defenders of Wildlife; Nogales border wall at night, Peg Hunter

## 170+ Organizations Take Action As Border Wall Expansion Threatens Wildlife And Public Lands

Contact: Steve Holmer, Vice President for Policy, American Bird Conservancy (ABC).  
Phone: 202-888-7490 | Email: sholmer@abcbirds.org

fragile and critical habitat of the Tijuana Estuary. Here in Arizona, at Organ Pipe National Monument, REAL ID waivers allowed a new fence to edge the monument, leading to increased flooding rather than halting people.

Right now in Texas, both the Bentsen-Rio Grande Valley State Park and the National Butterfly Center are facing imminent construction of a new border wall. Despite the narrative that no funding has gone to border wall construction, evidence proves that to be false, with twenty miles of new walls just west of El Paso, near Santa Teresa, New Mexico. We are facing the loss of thousands of acres of land along the Rio Grande that will end up on the other side of the new wall. And this is all happening right now.

### TAKING ACTION

The U.S.-Mexico border is turning into a battleground for environmental and human protections. The human cost of hardened borders is gut-wrenching. The group Humane Borders has so far recorded 3,244 migrant deaths between October 1999 and April 30, 2018. At their website ([humaneborders.org](http://humaneborders.org)), you can visualize this terrible spread of data on a collaborative mapping project.

If our borders are further hardened, the cost will be human and wildlife deaths, our friendships and collaborations, and an unknown amount of environmental damage.

The work and advocacy being poured into this issue are a light in the dark.



(Washington, D.C., November 6, 2018) A coalition of more than 170 organizations supporting wildlife conservation and public lands sent a letter to U.S. Secretary of Homeland Security Kirstjen M. Nielsen expressing serious concern over plans to expand the United States – Mexico border wall across environmentally sensitive conservation areas of Lower Rio Grande Valley National Wildlife Refuge, Santa Ana National Wildlife Refuge, Sabal Palm Sanctuary, Bentsen-Rio Grande Valley State Park and National Butterfly Center, Big Bend National Park, Big Bend Ranch State Park, and Black Gap Wildlife Management Area.

The groups, which include American Bird Conservancy, American Birding Association, National Audubon Society, National Wildlife Refuge Association, Natural Resources Defense Council, and Texas Audubon, are steadfastly opposed to a border wall across these parts of Texas due to the negative effects it would have on birds and other wildlife, and their habitats.

A Department of Homeland Security (DHS) letter states that: “DHS remains committed to environmental stewardship. DHS has been consulting, and intends to continue doing so, with stakeholders including federal and state resource agencies and affected landowners. Such consultation facilitates DHS’s assessment of potential impacts and informs its efforts to minimize, to the extent possible, potential impacts to the environment, wildlife, and cultural and historic resources.” But the Department has exercised waiver authority on nine occasions to avoid compliance with environmental laws.

“We urge that the environmental waivers be withdrawn, and that wall construction be halted in areas that threaten birds and other wildlife in favor of better high-tech alternatives,” said Steve Holmer of American Bird Conservancy. “It is crucial that DHS prevent unintended impacts to already fragile wildlife ecosystems within some of the country’s most biologically diverse parks and reserves. The proposed Border Wall and its associated levees, additional structures, fencing, roads, lighting, cameras, and sensors pose an unacceptably high risk to flora and fauna.”

The Lower Rio Grande Valley is a special region, gifted with an unusually wide variety and abundance of birds and other wildlife. Protected areas in the region attract large numbers of wildlife-watching tourists from around the world, and provide essential economic activity in Texas. According to a 2011 Texas A&M University study, nature tourism—primarily bird-watching—contributes \$463 million annually to the local economy.

Bentsen-Rio Grande Valley State Park, which includes part of the World Birding Center, hosts several threatened species and is considered to be one of the nation’s top bird-watching destinations. The park drew nearly 30,000 visitors in 2016 and, as with other state parks, tourism has been growing by about 5 percent annually.

According to a 2016 U.S. Fish and Wildlife Service analysis, more than 100 federally listed endangered species, from obscure plants to Black-footed Ferrets, could be impacted by a completed wall. Endangered Species Act (ESA)-listed species and birds of conservation concern in the border region include Bald Eagle, Black-capped Vireo, Cactus Ferruginous Pygmy-Owl, California Condor, California Least Tern, Coastal California Gnatcatcher, Golden Eagle, Least Bell’s Vireo, Masked Bobwhite (Quail), Mexican Spotted Owl, Northern Aplomado Falcon, Piping Plover, Red-crowned Parrot, Southwestern Willow Flycatcher, Western Snowy Plover, Yellow-billed Cuckoo, and Yuma Clapper Rail.

# Meet the birds on the border



Ferruginous Pygmy-Owl, Richard Fray

## CACTUS FERRUGINOUS PYGMY-OWL

The Ferruginous Pygmy-Owl will not fly more than 5 feet off the ground, and like many other species, will avoid open areas with no protective plant cover. A hard barrier like a border wall will further segment an already threatened population.



Greater Roadrunner, Doris Evans

## GREATER ROADRUNNER

The Greater Roadrunner's habitat extends far into Mexico, but not much farther north than the U.S. Sonoran Desert. While it is typically a resident species, some will wander great distances. The roadrunner prefers to run along the ground rather than fly and will likely be impeded by a border wall.



Ruddy Ground-Doves, Dave Curtis

## RUDDY GROUND-DOVE

The Ruddy Ground-Dove is another species that travels to winter in our warmer desert weather. With a hardened barrier, this is another bird we could see fewer of here in Arizona.



Montezuma Quail, Cliff Catthers

## MONTEZUMA QUAIL

The habitat of the elusive Montezuma Quail has already greatly shrunk in the southwestern U.S., and the population in Mexico is understudied. Another low flying bird, the quail is very skittish and will likely face many of the same problems as the Pygmy Owl.



Elf Owl, Tom Benson

## ELF OWL

The Elf Owl migrates into northern Mexico and Arizona for breeding season. A low-flying bird, the Elf Owl could face further habitat shrinkage with a barrier between Mexico and the United States.

### FURTHER READING:

Read the letter from scientists warning about the border wall: Peters, Robert, et al, 2556 scientist signatories from 43 countries (including 1,472 from the United States and 616 from Mexico); Nature Divided, Scientists United: U.S.–Mexico Border Wall Threatens Biodiversity and Binational Conservation, BioScience, Volume 68, Issue 10, 1 October 2018, Pages 740–743. [bit.ly/2AVOSi2](https://bit.ly/2AVOSi2)

The Defenders of Wildlife's comprehensive report on border wall impacts to wildlife: *In the Shadow of the Wall*. [newsroom.defenders.org/in-the-shadow-of-the-wall/](https://newsroom.defenders.org/in-the-shadow-of-the-wall/)

# Meet the activists on the border



“Walls do not stop human migrations, but they do sever family, community, and cultural connections. But, walls do stop water, flora, and fauna migrations. The guaranteed devastation to human and wild communities from an ineffective border wall is why I speak out. The rhetoric of fear should not condemn so much life to destruction and death.”

—Janay Brun,  
volunteer with Sierra Club  
and former border resident  
and wildlife researcher

“The border wall isn’t just a symbol of hate; it’s a looming environmental catastrophe. The U.S.–Mexico borderlands are a spectacular national treasure, home to national parks, wildlife refuges, and almost 100 endangered species. To slice a landscape-scale barrier through these areas is unjustifiable and insane, especially when it does nothing to stop people or drugs from crossing the border.”

—Laiken Jordahl,  
Borderlands Campaigner,  
Center for Biological Diversity

“A country’s borders can embody fear of others and of the outside world or it can symbolize freedom and confidence. Sadly, we seem to be opting for the first model. While the U.S. should, of course, control its borders, there are many ways to do that. The border wall hurts both people and wildlife and also fundamentally changes America’s character. There are better options.”

—Dinah Bear



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AT THE CAPITOL!**

Wednesday, February 13, 2019

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GET ON THE BUS FOR  
ENVIRONMENTAL DAY  
AT THE CAPITOL!**

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Join us and let someone else do the driving.

When: Wednesday 2/13/2019  
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Meet Place: Historic Y  
738 N. 5th Ave. 85705  
Departure Time: 6:00AM  
R.S.V.P: email Whelan at  
Sarah.Whelan@sonorandesert.org







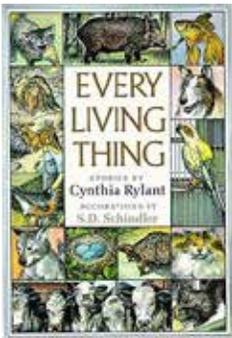
# We Heart Books Debbie Honan

For years now we've been hearing that technology is going to replace books, and to a certain extent it has. According to a recent American Time Use Survey, the share of Americans who read for pleasure on a given day has fallen by more than 30 percent since 2004 and the number of adults not reading a single book in a year tripled between 2004 and 2018. People, young and old, are constantly interfacing with television, smartphones, computers, and social media with a world of information available at the keyboard never far from their fingertips.

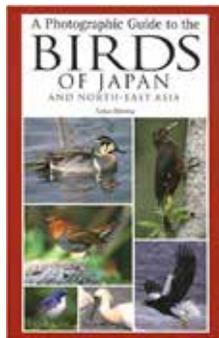
Reading, on the other hand, is quiet entertainment. To enjoy a book requires us to put aside multi-tasking and concentrate on a single task, which has become increasingly difficult in our stimulation-saturated society. But, to paraphrase Mark Twain, rumors of their death have been greatly exaggerated.

We love books at the Nature Shops, and we know you do, too. We have kid's books, essay books, cookbooks, field guides, and, of course, books on birds—feeding birds, finding and identifying birds, growing plants to attract birds—and so many more books. Humorous, sad, inspiring, educational, scientific, informative, historical, artistic, fictional—we have them all. We even have used books, generously donated by our members. And, if you need accessories to go with your books such as optics, bird-friendly coffee, journals, hats, and t-shirts, well, you're in luck because we have all that, too.

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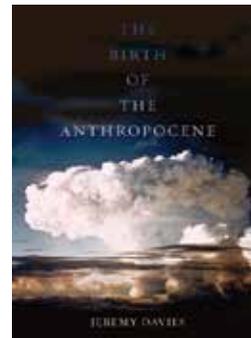
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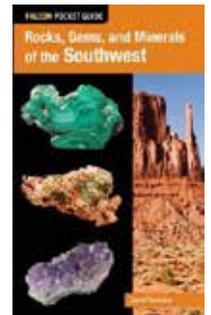
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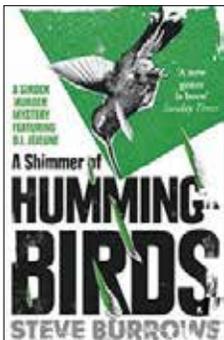
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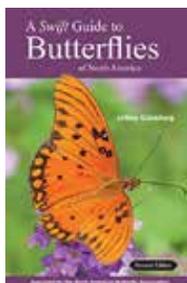
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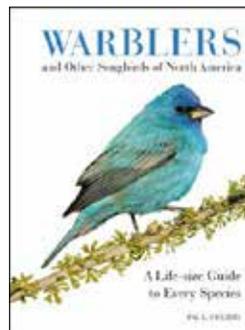
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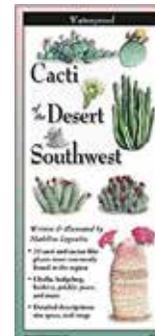
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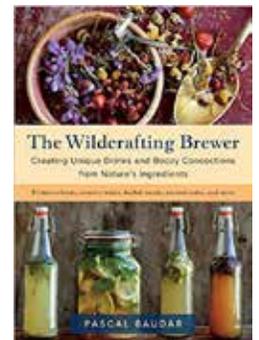
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## BOOK REVIEW

# Knowing the Birds, Knowing Ourselves

A review by Rick Wright

Birders of my generation will recognize the book's title. But fear not, this is far from a "rewrite" of the Roger Tory Peterson classic: this is a completely new bird book on a completely new scheme, a bird book that could only have been written by Ted Floyd.

The book's subtitle—*The Art & Adventure of Birding*—is our first clue. Art? Adventure? Apparently there is more to this birding business than simply pinning names to objects—and Floyd, the editor of *Birding* magazine and author of several other books, including the well-received Smithsonian field guide (2008), is just the person to show us just how much more. Ornithologist, writer, and all-round curious person, Floyd argues that over the past decade or so our favorite hobby, once "exclusionary [and] underpinned by a caste system of skill level," has developed into an intensely humanistic activity accessible to all, enjoyable by all, and that by leaving behind the quaint emphasis on identification and listing, today's birder goes into the field eager to look at birds in new, holistic ways. Ours is a "post-birding" age, he suggests, and there are as many ways to approach the study of birds as there are post-birders.

Floyd makes the point in a series of 200 species accounts. To call them "species accounts" misleads, though. Each is devoted to a single kind of bird, in the usual way of field guides and handbooks, but these one-page entries dispense entirely with the traditional litany of measurements and field marks. Instead, each account is, for lack of a better word, the brief and always entertaining story of a bird. And each story illustrates a lesson meant to help the reader find her way, gradually and pleasurably, into the practice of birding.

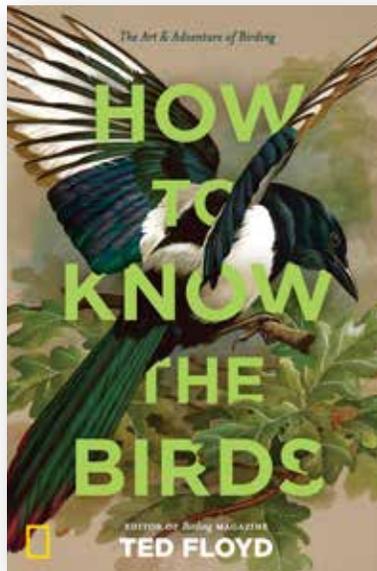
Following good pedagogic practice, the 200 lessons begin with the most basic principles and progress steadily through to some of the most vexing problems—or rather, the most captivating questions—in current ornithology. Two other organizational schemes overlie this fundamental thematic sequence. The birds are presented not in any fusty taxonomic order but rather by season, from the depths of winter with its waxwings and waterfowl to the exciting height of fall migration with its massive southbound flights and vagrants. Simultaneously, the stories reproduce the classic stages of a birder's development, beginning with the "spark" all the way through to a consideration of the unsolved problems in ornithological science. Ontogeny recapitulates phenology here.

Along the way, we learn tricks and techniques for identifying about 20% of the birds of North America (along with a few well-chosen surprises from other regions). Many of the principles set forth in the early sections of the book—pay attention to size and shape as well as color and pattern, be aware of variation—will be of practical value

only to the rankest of neophytes, but every birder, no matter how experienced, will find more and more that is new as the book's "year" proceeds. How many genders does the Ruff have? What do Western Grebes do at night? Where might that wintering Fox Sparrow at your feeder have come from?

Much of the information provided in the species accounts is what we might call biological, introducing such matters as migration and navigation, species concepts and nomenclature, and avian memory and social structures. These and many other aspects of bird study are presented as inviting mysteries, opportunities for inquiring birders to learn more, to ask their own questions, and to seek their own answers. But as Floyd's introduction neatly points out, we—the humans and the birds—are "in this together," and some of the most revealing and most inspiring chapters in *How to Know the Birds* are those that directly address the human side of birding. What are we actually doing when we say we are birding? What are the sources of our knowledge about birds? How have the internet, digital cameras, and new sound recording technology changed birding? A cluster of accounts, some of them headed simply and eloquently "Things Birders Do," introduces the new birder (and no doubt some more experienced hands, too) to the ways birding can bring us together, online and in life; bird festivals, state and local bird clubs, and the venerable listserv are all institutions experienced birders take for granted, and all institutions that newer birders may never have heard of. Knowing about these opportunities can make all the difference to a beginning birder: After all, one of the most rewarding ways to know the birds is to get to know each other.

Like the Petersonian original, this new *How to Know the Birds* is illustrated with simple and appealing drawings, this time from the pencil of N. John Schmitt. The cover is a tour de force of book design, with words and image overlapped and intertwined—a perfect evocation of what is inside, a wonderful text combining science, art, and joy in a way sure to inspire any birder.



Rick Wright leads *Birds and Art* tours in Europe and the Americas for Victor Emanuel Nature Tours. Among his recent publications are the American Birding Association Field Guide to Birds of Arizona and the Peterson Reference Guide to North American Sparrows.

*How to Know the Birds: The Art and Adventure of Birding*  
 Ted Floyd  
 National Geographic, 2019  
 304 pages, hardcover — \$28



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



Sandhill Cranes, Ned Harris

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