

Vermilion

FLYCATCHER

October–December 2018 | Volume 63, Number 4





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

NATURE CENTERS

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

Paton Center for Hummingbirds

477 Pennsylvania Ave
Patagonia, AZ 85624
520-415-6447
Hours: Open dawn to dusk

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Contents

- 04 News + Events
- 12 Paton Center for Hummingbirds
- 13 Cuckoos on the Coronado: Results of Four Years of Yellow-billed Cuckoo Surveys on Coronado National Forest
- 14 Southeast Arizona Bird Calendar
- 15 The Return of the Mexican Duck
- 16 Habitat at Home's Featured Habitat: Hacienda at the River
- 17 Habitat at Home Plant Profile
- 18 The Layman's Guide to a Successful County Big Year
- 20 Birds Benefit Business Alliance
- 20 Birding Travel from Our Business Alliance Partners
- 21 Conservation News
- 25 Nature Shop Winter 2018 Catalog
- 29 Book Review



Thank You, Tucson Audubon Members

In January of 2010, I remember paying a surprise visit to an Audubon chapter that straddles the line between Michigan and Wisconsin. Members of the Chappee Rapids Audubon Society were wrapping up their business meeting as I slid into a student chair-desk at the back of the room. “Hey, it’s the Michigan Audubon guy!” someone called from across the classroom. “And he’s wearing flannel!” exclaimed another member. Such is the warm welcome you receive when you drift into an Audubon chapter meeting in the dead of winter in Marinette, Wisconsin.

The 2018–2019 season of Tucson Audubon Society’s monthly chapter meetings, dubbed *Living with Nature*, kicked off in September with a presentation about former Secretary of the Interior, Stuart Udall. In October, we’ll be hosting presentations about raptors and owls that you won’t want to miss. *Living with Nature* programs are opportunities for Tucson Audubon to engage and share with our 3,000-plus members and residents of the greater Tucson community. *Living with Nature* programs focus on the importance of humans’ connection to nature, and are free and open to the public.

I want to personally invite you to celebrate your connection to birds and nature

during Tucson Audubon’s annual gala event—*Fly!*—which takes place Saturday, November 3, 2018. By now you’ve received a handsome gala invitation featuring Charley Harper’s iconic artwork, *Mystery of the Missing Migrants*. The evening will feature the storytelling and photography of Noah Strycker, who set a world record when he visited 41 countries on all seven continents, and observed a single-year total of 6,042 species of birds—more than half the recorded birds species on the planet. With the support of members like you, we endeavor to raise \$50,000 in support of Tucson Audubon projects and programs during this year’s gala.

A project inspired by the backyard observations of chapter member, Joy Reamer, gained significant ground in 2018. Tucson Audubon’s study of the nesting habits of Lucy’s Warblers (pictured on the back cover) returned some interesting results this year and we’re eager to share them. Thus, I hope to see many of you on Monday, December 10, during the Tucson Audubon annual members’ holiday potluck. We’ll convene at our traditional location, St. Philip’s Church, for an evening of fellowship, expressions of gratitude, and an informative presentation by our conservation staff. I’m looking forward to the casseroles, coffee, and conversation.

Through a decade of attending Audubon chapter meetings, I’ve found community in school cafeterias, public libraries, and church basements. I’ve witnessed grassroots organizing to oppose developments that would harm critical nesting habitat for Pileated Woodpeckers. I’ve enjoyed viewing thousands of photographs—of birds, dragonflies, and landscapes—flashing across those seemingly indestructible Da-Lite projector screens. I’ve been humbled by Audubonners’ generosity to their communities; members of the Chappee Rapids Audubon Society have donated full sets of Peterson Field Guides to every school in their service area. I remain in awe of the work of Audubon chapters, including Tucson Audubon, for all they do to inspire people to protect and enjoy birds.

I’m proud to be *your* “Audubon guy.” And if the weather ever cools, you might even see me wearing flannel again.



Best regards,

Jonathan E. Lutz

Will You Join Tucson Audubon Today?



Your membership supports Tucson Audubon’s efforts in:

Conservation We enable people to conserve our natural environment through on-the-ground activities.

Advocacy We promote public policy and speak out for wild birds and their homes.

Restoration We create sustainable wild bird habitat.

Engagement We help people connect with wild birds.

Benefits include:

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

All funds are used for local conservation efforts.

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

TUCSON AUDUBON'S 10TH ANNUAL GALA

Come **FLY!** With Us

CELEBRATE THE WONDER OF NATURE AND
THE CONNECTION BETWEEN BIRDS AND PEOPLE.

Saturday, November 3, 2018 · 6-10 PM
Westward Look Wyndham Grand Resort & Spa

In one glittering evening:

- Meet birder and global adventurer Noah Strycker at our exclusive *VIP Meet & Greet with Noah* (limit 40).
 - Enjoy *Fizz & Feathers*, a rooftop reception with bird's eye views, cash bar, and live music.
 - Take a chance at winning your own wine cellar!
 - Challenge fellow attendees to outbid you in the Live Auction (new this year).
- Feast upon a gourmet dinner by Executive Chef Todd Sicolo and revel in the epic storytelling of Noah Strycker.

Dress: Festive Attire



Birding Without Borders: An Epic World Big Year with Noah Strycker

In 2015, bird nerd Noah Strycker became the first person to see more than half of the planet's bird species in a single, year-long, round-the-world birding trip. Anything could have happened, and a lot did. He suffered fevers and sleep deprivation, survived mudslides and torrential floods, skirted war zones, and had the time of his life. Birding on seven continents, Strycker enlisted the enthusiastic support of local birders (including Tucson birders!) to identify more than 6,000 species. He shared the adventure in real time on his daily blog and now he reveals the inside story. This humorous and inspiring presentation about Noah's epic World Big Year will leave you with a new appreciation for the birds and birders of the world.



The *FLY!* Gala Box Office is now OPEN.

- *Fly!* Gala Guest—\$150: includes *Fizz & Feathers* reception and evening dinner program
- *Fly!* GalaVIP Guest—\$200: includes *VIP Meet & Greet with Noah*, *Fizz & Feathers* reception, and evening dinner program
- Table Sponsor—\$1,500: 10 guests
- Gala + *Birding with Noah*—\$450: includes field trip and *Fly!* guest ticket (see above)

SPECIAL THANKS
TO OUR SPONSOR



Tucson Electric Power

For sponsorship opportunities contact us at 520-209-1812 or events@tucsonaudubon.org.

TUCSONAUDUBON.ORG/GALA

© Charley Harper Art Studio

Birding with Noah—Patagonia and Las Cienegas

A full-day field trip on Friday, November 2 (limit 16)

Join global adventurer Noah Strycker, along with John Yerger and Jake Mohlmann of Adventure Birding Company, on a tour of the species-rich Patagonia area and the Las Cienegas grasslands. The Paton Center for Hummingbirds will provide a great lunch spot and the possibility of seeing Violet-crowned Hummingbirds! Nearby, the grasslands adjacent to Sonoita hold an entirely different set of species, including Lilian's Eastern Meadowlark, Loggerhead Shrike, and White-tailed Kite. It will be a day to remember!



Violet-crowned Hummingbird, James Dolph



Charley Harper Art Studio

About Charley Harper

Charley Harper (August 4, 1922–June 10, 2007) was an American Modernist artist renowned for his highly stylized wildlife prints, posters, and book illustrations. Harper illustrated *The Golden Book of Biology*, *Ford Times* magazine, and created works for organizations like Hawk Mountain Sanctuary and Everglades National Park. He regarded the picture itself as an ecosystem in which all elements are interrelated, interdependent, and perfectly balanced.

Adult Education Classes

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

Visit tucsonaudubon.org/education for details and to register.

Drawing Birds and Nature with Saraiya Kanning

Drawing helps us pay attention and see the world around us with a fresh eye. In this class, students will practice basic drawing skills while slowing down to observe birds, plants, wildlife, and the landscape around Tucson Audubon's Mason Center. No prior experience necessary.

Artist level: beginner/intermediate

Fee: Member \$35, Non-member \$40 (fee include materials)

Date: Saturday, October 20, 8-11 am

Class Size: 7

Location: Tucson Audubon's Mason Center, 3835 W Hardy Road, Tucson, AZ 85742



Acorn Woodpecker, S. Kanning

What bird is that?

Beginning Birding Course (for novice birders and birders-to-be)

Explore the basics of bird watching with classroom instruction and field trips. What is birding? Learn how to select binoculars, develop techniques for identifying birds, choose birding guides, and use them to recognize common birds of Southeast Arizona. Discover where to go birding and why Tucson Audubon Society is important for birding and conservation. Let's have fun!

Instructors: Jim Logan and Sandy Holmes, with over 10 years' experience teaching beginning birding classes.

Classes: Tuesdays, November 6 and 13, 6:30-8 pm

Field Trips: Sundays, November 11 and 18

Class Size: 15

Location: Tucson Audubon's Mason Center, 3835 W Hardy Road, Tucson, AZ 85742

Fee for 2-week course: Member \$10, Non-member \$45 (includes 12-month membership)

Pre-registration is required. This is a four-part course held over a two-week period. Due to the limited space, we ask that upon registration you commit to attending the two scheduled class presentations and two scheduled field trips. We appreciate your assistance in allowing us to provide you with the best beginning birding learning experience. One fee covers the entire course.



Gambel's Quail, Doris Evans

Wild Medicinal Plants: Healing with Nature

In today's world full of pills and modern potions it is sometimes easy to forget that all medicines were once herbal-based. Join Ethnobotanist and Naturalist Vincent Pinto for an evening slide show and an outdoor workshop covering a wide range of local wild medicinal plants. Vincent will guide you in finding, identifying, collecting, storing, processing, and using a plethora of healing plants. Discover various native species that collectively address a broad spectrum of ailments, including headaches, stomach complaints, cuts/scrapes, eye infections, sore throats, dental issues, loose bowels, and more! During this fun and informative workshop Vincent will demonstrate how to make your own salves, tinctures, oils, sachets, teas, herbal baths, and smudges. Don't miss this opportunity to participate in your own daily health! *Those wishing to participate in the outdoor workshop must also attend the indoor slideshow.*

Instructor: Vincent Pinto

Class: Wednesday, November 14, 5:30-7 pm at the Historic Y Conference Room

Outdoor Workshop: Saturday, November 17, 9 am-3 pm at Raven's Nest Nature Sanctuary, Patagonia, AZ

Fee: Member \$85, Non-member \$100 (includes materials for several take-home wild medicines)



Vincent Pinto, Tom Richardson

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 include Tucson, Green Valley, and Oro Valley beginning in 2019. Visit tucsonaudubon.org/lwn for more details.

TUCSON

REI Tucson, rei.com/stores/tucson.html
160 W Wetmore Road, Tucson, AZ 85705
Register online or call 520-887-1938

October 10, Wednesday, 6:30pm

Raptors! Top Predators of the Avian World

Southern Arizona and the Sonoran Desert are renowned for their large variety of animal and plant species, especially birds. Among the most fascinating of those are the raptors, top predators of the avian world, which either live here year-round or migrate through the area at different times of the year. **Ana Laura Gonzalez** presents a beginning-intermediate birder level talk. Ana is a Volunteer Naturalist at Saguaro National Park as well as an Arizona-Sonora Desert Museum docent and narrator for their Raptor Free Flight program. *There will be no raptors on site for this event.*

November 16, Friday, 6:30pm

Wait... What? Africa has Penguins?

The iconic and endangered South African Penguin breeds along the cape of Southern Africa. The population has dropped by 90%. Learn how volunteers from around the globe worked to save 20,000 penguins imperiled by a massive oil spill in 2000. Presented by **Penny Miller**, retired zoo director from West Virginia, where she was also a wildlife rehabilitator, Master Naturalist and organic farmer.



African Penguins, Penny Miller

GREEN VALLEY

Desert Hills Social Center
2980 S Camino Del Sol
Green Valley, AZ 85622

November 17, Saturday, 10 am

Amazing Arachnids

Arachnids are full of surprises. Scorpions kiss and dance, spitting spiders squirt silk and glue, and vinegaroons spray almost pure acetic acid from their rear ends. At this Living with Nature talk, **Jillian Cowles**, author of *Amazing Arachnids*, will use stunning photographs to show the staggering array of survival strategies that her favorite creatures have developed as they have evolved over the past 400 million years.



Habronattus hallani adult male, Jillian Cowles

December 1, Saturday, 10 am

Raptors! Top Predators of the Avian World

See October 10 Tucson description.



Ferruginous Hawk, Don Sorensen

Celebrate Birds at the Members' Holiday Potluck

MONDAY, DECEMBER 10, 6 PM

St. Philip's in the Hills Episcopal Church

Tucson Audubon Society's annual holiday potluck is our year-end gathering of members. We welcome all members to join staff for an evening of fellowship, conversation, and a spotlight on the bird conservation work you make possible.

New Executive Director Jonathan Lutz (April 2018) will welcome members in opening remarks, followed by an engaging presentation about Lucy's Warblers from conservation staff members Jennie MacFarland and Olya Phillips. This event is FREE for Tucson Audubon Society members, though RSVPs are required. RSVP online via tucsonaudubon.org/calendar, or call 520-629-0510 x7002. Please indicate whether you will be bringing a salad, appetizer, main dish (vegan, vegetarian, or meat), dessert, or punch.



Olya Phillips and Jennie MacFarland with Lucy's Warbler nestboxes, Katie Brown

Please note: In true potluck fashion, and to minimize waste, members are kindly requested to bring your own plates, cups, cutlery, and serving utensils. Simple recipe cards are also appreciated by those with dietary restrictions.

'Tis the Season— Christmas Bird Counts!

Southeast Arizona has as many as 14 Christmas Bird Counts each year. Contact the compiler, join a team, and have fun!

Tucson Valley: December 18

The Tucson Valley Christmas Bird Count will celebrate its 47th year in 2018! Join us on Tuesday, December 18, as we seek to count every single bird in Tucson, which means we need a lot of people out in the field. The count always ends with a fun-filled evening at the "Countdown Potluck," where we share stories, report rarities, and make new birding friends. If you would like to join in on this collaborative citizen-science adventure please contact compiler, Luke Safford, at saffordluke@gmail.com.

Santa Catalina Mountains: December 15

The Santa Catalina Mountains CBC has a long history of monitoring changing avian diversity and abundance, all in an area that's a lot of fun to bird. The count circle reaches from the rich riparian habitat of Tanque Verde Creek in the south to coniferous forests around Summerhaven to the north. Sabino and Ventana Canyons mark the west side and Redington Pass's oak and juniper habitat on the east. We need teams to explore known hotspots, mountain trails, and perhaps some previously uncounted areas. Everyone can contribute, whether you want to hike a remote mountain trail or count birds in the comfort of your own back yard! Kendall Kroesen and Mike Judd will be co-compiling the circle this year. Let us know if you want the same route as last year or if you are new, what level of exertion you are comfortable with! Contact Kendall at kkroesen@cox.net, 520-971-2385.

Dec. 15	Nogales	Bill Lisowsky/Alan Schmierer
Dec. 15	Ajo	Christopher Riesberg
Dec. 15	Hassayampa	Chrissy Kondrat-Smith
Dec. 16	Ramsey Canyon	Ken Blankenship
Dec. 20	Patagonia	Patsy Vanden Berge
Dec. 28	Green Valley	Malcolm Chesworth
Jan. 3	Appleton-Whittell	Suzanne Wilcox
Jan. 5	Dudleyville	Doug Jenness

Find the complete list of Arizona counts at tucsonaudubon.org/cbc.



Stephen J Vaughan

Mayor's Proclamation

At the Southeast Arizona Birding Festival: Tucson Mayor Jonathan Rothschild continues his support for birds by declaring 2018 the Year of the Bird in Tucson.

Events Calendar

OCTOBER

- 6 Living With Nature Green Valley
- 10 Living With Nature Tucson
- 11/13 Advanced Nature Photography Class
- 20 Drawing Birds & Nature Class

NOVEMBER

- 2 Go Birding with Gala speaker Noah Strycker
- 3 Fly! Gala with Noah Strycker
- 14/17 Wild Medicinal Plants Class
- 16 Living With Nature Tucson
- 17 Living With Nature Green Valley

DECEMBER

- 1 Living With Nature Green Valley
- 10 Annual Holiday Potluck
- 15 Santa Catalina Mountains CBC
- 18 Tucson Valley CBC

Arizona Field Ornithologists State Meeting, Ajo



October 26–28
Nathan Pieplow, an expert on bird songs, will be the featured speaker at the 12th annual state meeting of the Arizona Field

Ornithologists in Ajo, Arizona. The Saturday session at the Sonoran Desert Inn and Convention Center will also include interesting presentations and posters on Burrowing Owl, Ferruginous Pygmy-Owl, Ridgway's Rail, "Aleutian" Cackling Goose, and the identification, status, and distribution of other Arizona birds. On Friday afternoon and Sunday there will be an assortment of field trips and workshops, including a gull and shorebird workshop to Puerto Peñasco. You can still register at: azfo.org

Field Trips

Luke Safford, Field Trip Coordinator

One of our most popular field trips is the annual trek to California Gulch with Melody Kehl. This year did not disappoint as we enjoyed excellent views of Buff-collared Nightjar! Trips like these not only get us out in nature and seeing some great new birds, but also give us an opportunity to meet new friends and learn about conservation. Thank you to all of the field trip leaders who offer us the chance to bird together!



Walking up the California Gulch, Shelli Spencer

Sweetwater Wetlands—Every Wednesday (7 am in October; 8 am November and December)

Join us as we explore the wilds of Sweetwater Wetlands every week. Expect a larger group than other field trips, but also a species list of 55+ in the fall and early winter. Returning rarities to look for include American Bittern, Baltimore Oriole, and Black-and-white Warbler.

Sabino Canyon— Every 1st Friday and 4th Wednesday of winter months

Led by Sabino Canyon 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. Maybe the partially leucistic Phainopepla will return again!

Rancho Santa Cruz—Saturday, November 10

This field trip has been granted special permission to access Rancho Santa Cruz's 130 acre private parcel on the Santa Cruz River in Tumacacori. The property is just south of the Santa Gertrudis Lane section of the Santa Cruz River that has yielded many rarities, including last winter's Sinaloa Wren and Rufous-backed Robin flock. We will bird the ranch property and the river habitat.

Tucson Botanical Gardens— Tuesdays, November 13 & December 11

This walk is especially good for beginning bird watchers and those interested in attracting birds to their own yards. Along the way we'll point out some of the many bird-friendly plants at the gardens and give ideas for how to bring birds into your own yard.

Mission Garden— Thursdays, November 15 & December 13

Explore this reconstruction of the four-acre 18th-century garden at the base of "A" Mountain that was associated with the Mission San Agustin (the northern-most mission in Arizona). This walk is good for beginning bird watchers and gardeners.

Florence Farmlands—Monday, November 19

We'll drive along Arizona Farms Road for possible sightings of Burrowing Owls and Ferruginous Hawks, with a stop at a cattle pen for blackbirds. This seems an unlikely area but can be quite productive, with sparrows, raptors, cardinals, meadowlarks, common desert birds, and more.

Northeast Tucson—Friday, November 23

It's Black Friday birding at its best with the first dozen species 50% off their regular price! We will check some northeast Tucson favorites for those super-late migrants; Vermilion Flycatchers are always guaranteed or double your money back.

Santa Cruz Flats—Monday, December 10



Try for Crested Caracara on the Santa Cruz Flats trip!
Martin Molina

We'll head to Arizona City and check out the ponds, which usually host a small variety of wintering waterfowl and common desert birds, before heading into the agricultural areas of the flats. This trip usually provides a variety of raptors, including Crested Caracara, if we're lucky, plus sparrows, meadowlarks, Horned Larks, and maybe Burrowing Owls.

Slaughter Ranch—Friday, December 28

Located in extreme southeast Arizona, the Slaughter Ranch is a historic site with some great birding. Because of its distance from Tucson, it isn't often birded. There are always interesting birds to be seen on this all-day trip!

Upcoming Field Trips: To register, get more info, and see additional field trips, visit tucsonaudubon.org/fieldtrips

Volunteer Spotlight

Wondering what Tucson Audubon volunteers have been up to this summer? Definitely not taking a break!



Twenty-six volunteers planted over 100 plants in the new Pollinator Garden at the El Rio Preserve on July 14. Volunteers, some as young as ten years old, came from as far away as Venezuela and Sonora. We'll be busy planting more Pollinator Gardens in the future, so keep your eye out for opportunities. Photo by Rebecca Tinoco



We keep adding to the number of our wonderful Paton Center Birding Ambassadors! We now have over 20 volunteers who keep the feeders clean and full as well as make birding guests feel welcome. There is always room for more volunteers as our visitors (both avian and human) continue to increase. Photo by Patty Tersey



A “behind-the-scenes” look at the folks who make our annual Gala an excellent experience for all of us. Volunteers play a huge role in shaping all of our events as your feedback, experience, and knowledge are so helpful. The Gala is coming up soon, on November 3, 2018. If you'd like to help, please email Luke Safford (see below). Photo by Jonathan E. Lutz



Of course, the Southeast Arizona Birding Festival happens only because of our large cadre of volunteers (78 this year!) who jump into every facet of the festival. Sherry Massie worked the Habitat at Home booth this year and her smile welcomed over 2,000 people who came through the Expo. Photo by Joanna Strohn

Wondering how to get involved? Here is the quick three-step process:

- 1) Email Luke Safford at lsafford@tucsonaudubon.org and tell him you want to start volunteering.
- 2) Meet with Luke and sign the Volunteer Agreement.
- 3) Join a Volunteer Team—it is always better to work with a team!

If you would like to learn more about current volunteer opportunities, please email Luke.



TUCSON AUDUBON SOCIETY
FREQUENT FLYERS

Frequent Flyer Program

Sandhill Cranes aren't the only frequent flyers bringing joy to southeast Arizona. Tucson Audubon's very own Frequent Flyers make our work possible in a special way by giving monthly. We hope they know how much we appreciate their monthly flights!

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

Will you join this growing flock?

Monthly Sustaining Gifts Are Easy, Effective, and Eco-friendly

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. It's good for birds and the environment!

Here is how it works:

- Determine the amount of your monthly gift and provide payment details.
- Your credit card or bank account is charged automatically each month for your chosen amount. Our system sends you an auto-generated confirmation e-mail each month.
- Each January, we will send you an annual giving statement by mail, for your tax purposes.
- As a Frequent Flyer, your membership renews automatically each year, ensuring that you'll never miss an issue of the *Vermilion Flycatcher*.

By joining our growing flock of Frequent Flyers, you help Tucson Audubon balance our resources throughout the year, reduce fundraising expenses, and consume fewer resources by eliminating the need to send paper renewal notices.

THANK YOU!

Welcome New Members

Mary Ackerley, Pat Dion & Dave Amick, Debbie Asbill, Jean & Larry Ashby, Heather Bentz & Curtis Freese, Susan Borne, Renee Bray, Jerry Broadus, Laura & Sean Bruner, Lois Bunn, Judy & Peter Burgard, Tom Casey, Jodie Chertudi, Lynn Citron, Stephen Cronin, Trent Durnan, Fred Fox, Ariel Gilbert-Knight, Irene Godden, Barbara & Gerald Goldberg, Elaine Grace, Pamela Grant, Antoine Guillaud, Tina Hall & Bruce Ventura, Avis Hall, Virginia Hall, Robert Harlan, Catherine Harold, George Hervey, Judy Holloway, Katie Hughes, Joy Jackson, Virginia & Larry Johnson, Terry Kennedy, Lucy & John Kihlstrom, Carl Kikuchi, Herbert King, Terri Klatko, Ashley La Russa, Alison Lang, Vishnu Kanupuru & Lucille Le Corre, Pauline Leonard, Diane Liguori, Jim Livingston, Carl Loeffel, Virginia & Ken Lopez, Penny Miller, Aaron Miller, Roberta Warshaw & Alan Monchick, Pamela Morey, Pat Mullur, Jeffrey Muse, Mattie Nason, Kathy Neff, Cynthia English & Denise Nettesheim, Victoria Newman, Cholla Nicoll, Marcia Lincoln & Victor Ong, Anne Palmer, Susan Post, Phyllis Radtke, G. P. Raju, Jane Raymond & Bob Mouglin, Libby Reed, Paula & Harry Ridgway, Ivone & Stephen Rohan, Eric Scheuering, John Schmid, Linda & Mike Simpson, Cyndi & Scott Sinclair, Randy Stringer, Kathleen Sudano, Susan & Timothy Swanson, Debbie Carr-Taylor & Mike Taylor, Aaron Thomas, Linda Thompson, Ann & Scott Tuthill, Mary Veres, Terry West, Jaci & Mason Wilkins, Peggy Williams

Gifts In Honor/Memory

In honor of the Paton Center leadership and the Paton Center Restoration Crew from Bonnie Paton Moon & Richard Moon

In honor of Mimi O'Donnell from Catherine Carson

In honor of Julia Gordon from Gale Harris

In memory of Janice Hugo Martino from Maggie Leonard

In honor of Mimi O'Donnell from Carmella & Stephen Renton

In memory of Robert Oren "Scotty" Campbell from Dorothea Warren

Birding Fun on the San Pedro

On Saturday, September 22, we gathered on the banks of the San Pedro River in St. David to celebrate the river and the nearby communities. With bird walks, local vendors, and lots of family fun, over 225 people enjoyed a day down by the last free-flowing river in the Southwest.



Bird walk, Jonathan E. Lutz



Southeast Arizona BIRDING FESTIVAL

Celebrating the 8th Annual Southeast Arizona Birding Festival

What an incredible festival this year! We were amazed at the substantial growth the Southeast Arizona Birding Festival experienced, thanks in large part to the partnership, teamwork, and support of sponsors, field trip leaders, volunteers, and our membership. We worked to improve our marketing schemes, changed our venue, and expanded the Nature Expo and free presentations so that we might reach a wider and more diverse audience, and it worked! We wanted to share a few numbers with you from this year's festival to give you an idea of how we changed and grew:

- 904 registrants (118% increase over last year)
- 2,480 Nature Expo visitors (178% increase)
- 98 activities (including 65 field trips)
- 30 exhibitors (87% increase)
- 78 volunteers and 61 field guides/presenters (56 and 38 last year)

Save the date for next year, August 7–11, and join the fun at the 2019 Southeast Arizona Birding Festival!

Thanks to our sponsors

Presenting Sponsor



Associate Sponsor



Supporting Sponsors



Contributing Sponsors



Our Life Birds signs were a big hit, Joanna Strohn; Bill Thompson III rocks out, Stephen Vaughn; The Nature Expo drew over 2400 people, Joanna Strohn; Kids found lots to do at the Expo, Joanna Strohn; A Great Horned Owl was one of the live birds present, Mia Hansen; Red-faced Warbler on Mt. Lemmon, John Hoffman; A great teaching moment at the Expo, Joanna Strohn





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The Paton Effect

Tina Hall, Paton Center Coordinator



Tina Hall, Paton Center Coordinator

The day I drove into Arizona to be the new Paton Center Coordinator, it rained! It has thundered and/or rained almost every day since mid-July. While Patagonia itself has been a bit left out in terms of accumulating rain, the monsoon has been spectacular to witness. This summer, the Paton Center received three different “monsoons”: one of rain, one of visitors, and one of birds.

Starting in July, with some major peaks in August and Labor Day weekend, the Paton Center has had steady visitation by hundreds of visitors. We have had several days of 50–70 visitors per day. Labor Day Sunday was likely our busiest day of the summer with many non-birders coming to see what the Paton Center was about and many photographers as well. July and August were also tour season; we had over fifteen birding tour groups visit the Center. Leaders and tour participants all loved the new pavilion and seating area and the new benches around the yard. New this summer, the Paton Center also began to host butterfly counters, tours, and field trips. The hard work of the Tucson Audubon restoration team is paying off with several months of moths and butterflies in the Grand Meadow. The very large Black Witch moth (the largest moth north of Mexico) was often seen in the pavilion and on a recent count, 49 species of butterflies were counted in the meadow and backyard.

Then there was the bird monsoon! Hummingbirds continue to increase in quantity with large numbers of Broad-billed, Black-chinned, and the ever-present Violet-crowned. With the days now becoming shorter, Anna’s are becoming more noticeable and we have a Rufous or two daily. Soon our winter sparrows will begin to arrive. Several guests to the back yard witnessed a Zone-tailed Hawk capture a squirrel and later, a White-wing Dove.

While the weather, sky, and birds have all been dramatic, my favorite aspect of the Paton Center is what I call the “Paton Effect.” People seem to feel comfortable sitting at the Center, comfortable enough that they begin chatting with the people next to them under the pavilion, or to the docent volunteer. Soon everyone is engaged in interesting conversation, often about bird trips, or of coming to the Patons’ yard in the past. People often exchange phone numbers, email addresses, or have lunch together at one of our picnic tables or in town. I have birded many places where one sits and watches feeders or birds, but none of them seems as social as the Paton Center. Is it because you are sitting behind a home? Is it because it feels like someone’s back yard? I am not certain, but as the Coordinator, I enjoy the stories and camaraderie that the Paton Effect brings to my job.

Now the days are getting shorter and the cottonwood trees are beginning to shed leaves. Soon there will be a nip in the air. The birds will continue to flow through, and I and the wonderful team of Audubon volunteers will continue to clean and fill feeders. We still have some spaces if you would like to volunteer, especially on Saturday afternoons. The Center is a friendly, some say meditative, place to volunteer and with the Paton Effect you will meet interesting folks from around the country and across the globe.



The Paton Effect in action!



Marion Paton's roses still flourish

Cuckoos on the Coronado

Results of Four Years of Yellow-billed Cuckoo Surveys on Coronado National Forest

Jennie MacFarland, Bird Conservation Biologist

In the Fall of 2014 the western population of Yellow-billed Cuckoos was officially added to the register of Endangered and Threatened Species as Threatened. This western population has undergone a catastrophic decline in the last century mostly caused by loss and conversion of riparian habitat. It is difficult to put exact numbers to this decline as surveys have not been consistent and the species is secretive, but specific examples are staggering. For instance, California had an estimated 15,000 breeding pairs of Yellow-billed Cuckoos before the 1850s. A serious population decline was noted in the 1940s and in 1977, 121–163 breeding pairs were documented. The current population is estimated at 40 to 50 pairs for all of California. In Arizona, populations have declined up to 80% in the last 30 years with an estimated current population of 170–250 pairs as of 2015, which represents the highest concentration in the country. Arizona is thus an important stronghold in the US for the western Yellow-billed Cuckoo. Tucson Audubon partnered with Coronado National Forest in 2015 to survey for Yellow-billed Cuckoos on southeast Arizona’s Madrean Sky Island mountain ranges.

In the American West, Yellow-billed Cuckoo habitat has long been associated with cottonwood and willow gallery forest along rivers, creeks, and other drainages, and the draft Critical Habitat focused on this habitat type. Tucson Audubon publicly commented that drainages in the Madrean pine-oak zone of the Sky Island mountain ranges of SE Arizona should be further evaluated for inclusion as critical habitat, as a nesting Yellow-billed Cuckoo was documented in 2014 during a Tucson Bird and Wildlife Festival trip to Montosa Canyon in the Santa Rita Mountains. So when Tucson Audubon staff and volunteers began surveying in this habitat type in 2015, we didn’t really know what to expect.

What we have found during the summer surveys of 2015–2018 are quite a lot of Yellow-billed Cuckoos. Over the last four years we have surveyed ten mountain ranges on the Coronado National Forest and documented 84 territories of Yellow-billed Cuckoos. The number of routes surveyed has varied year to year and results of what we found over the last four years is summarized in the table at the right. These results take into account repeat territories over multiple years and avoid double counting. Breeding Territory is defined as an area where breeding behavior was observed (i.e., a pair together in good habitat, carrying food etc.) and Occupied Territory is where Yellow-billed Cuckoos were observed but breeding behavior was not documented.

With the help of our amazing volunteer base, Tucson Audubon was able to demonstrate that the Coronado National Forest and southeast Arizona Sky Islands in general are an important nesting habitat for this declining population. All of these results represent a staggering amount of field time and work and we truly could not have done it without our amazing volunteers, who donated 2,568 hours to this project over the last four years. Thank you all so much!

View a map of all Tucson Audubon Yellow-billed Cuckoo survey results at aziba.org.



Yellow-billed Cuckoo in the Atascosa Mountains, John Hoffman

Mountain Range	# Breeding Territories	# Occupied Territories
Atascosa Highlands	10	17
Canelo Hills	9	4
Chiricahua Mountains	0	1
Huachuca Mountains	0	4
Patagonia Mountains	1	6
Rincon Mountains	7	2
Santa Catalina Mountains	2	1
Santa Rita Mountains	6	7
Tumacacori Mountains	1	4
Whetstone Mountains	0	2
Total	36	48
Grand Total: 84		

*This table shows only the results of Tucson Audubon’s Yellow-billed Cuckoo surveys on the Coronado National Forest and does not include additional surveys on Pima County lands or at Paton Center for Hummingbirds, which were also surveyed by Tucson Audubon Society.



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.

Southeast Arizona Bird Calendar

What our birds are up to October through December

Matt Griffiths

As I write this in mid-September it's difficult to think about winter birding while it is over 100 degrees out. Climate change notwithstanding, the calendar doesn't lie and recent patterns say that White-crowned Sparrows will be back to southeast Arizona in a week or two. It will be that rare moment in time when warm weather cicadas and cold weather White-crowns could be singing together. I'm bolstered by the fact that it's September, and I know those loud insects won't be around much longer.

If you've spent a summer in Tucson you know that once Halloween rolls around you can kiss the hot temps goodbye. October also brings big changes in our bird populations as the summer breeders have finally cleared out and our winter residents have all arrived. Species you normally associate with our Sky Islands such as Yellow-rumped Warbler, Ruby-crowned Kinglet, and American Robin are now being found in the valleys. Hackberry and saltbush thickets usually harbor an Orange-crowned Warbler or two.

October brings a good chance to find vagrant passerines such as eastern warblers. As fall turns to winter, other rarities like Lawrence's Goldfinch, Sage Thrasher, Rufous-backed Robin, Lewis's Woodpecker, or Varied Thrush could turn up. Be sure to check those sparrow flocks, as a White-throated, Harris's, or Golden-crowned could be mixed in with all the White-crowns!

HIGHLIGHTS FOR THE SEASON



Sandhill Crane spectacle

October brings the return of Sandhill Cranes to the southwest, in BIG numbers. Locally, the Sulphur Springs Valley is the place to witness one of the true amazing wildlife experiences of southeast Arizona. You should situate yourself at Whitewater Draw to witness the en masse liftoff of up to 20,000 cranes and thousands of geese at sunrise. If that's too cold and early for you, the birds return in large groups before lunch.



Sparrows in the grasslands

Sparrows move down from their summer haunts up north to take advantage of the seed bonanza resulting from our monsoon rains. The grasslands of the San Rafael Valley and Sonoita area fill with Vesper, Savannah, and Brewer's Sparrows. While you're out there, keep an eye out for Baird's Sparrow and Chestnut-collared and McCown's Longspurs at muddy cow tanks. For these species, 2017 was a great year.



Water full of fowl

Winter is classic waterfowl time in the southwest as shorebirds dwindle and ducks and other water lovers show up. Ponds at city parks such as Reid Park are great places to spot Redheads, Canvasbacks, Ring-necked Ducks, American Wigeons, Northern Shovelers, and more. Deeper lakes like Patagonia and Parker Canyon could have several types of grebes, mergansers, or the rare Pacific and Common Loons.



Rack up some raptors

The colder months of the year are the premier time to find raptors of all flavors. Santa Cruz Flats, the whole Sulphur Springs Valley, and even right in Tucson are great places to spot hawks, falcons, and even eagles. Take a drive along small farm roads and scan poles for fun birds such as Ferruginous Hawk, Prairie and Peregrine Falcons, Merlin, and Rough-legged Hawk in some years.

Sandhill Cranes, Cathy Wasson; Vesper Sparrow, Martin Molina; Hooded Merganser, Lois Manowitz; Ferruginous Hawk, Rhett Herring

The Return of the Mexican Duck Chris Benesh

One of the more vexing problems facing taxonomists is how to categorize tangled webs of organisms into neat and orderly classifications. In the bird world, there are several organizations that try and tackle this task. One of these, the American Ornithological Society's (AOS) Committee on Classification and Nomenclature of North and Middle American Birds (NACC) annually considers proposals for taxonomic changes relevant to North American birds and publishes changes in a supplement to the official checklist of North and Middle American Birds.



Male Mexican Duck, JN Stuart

One of the proposals brought before the AOS in 2018 was Tom Schulenburg's recommendation that Mexican Duck be elevated to full species status once again (that is, split from Mallard with which it has been lumped since the sixth edition of the AOU Checklist, published in 1983), so as to treat it in the same manner as Mottled, American Black, and Hawaiian ducks. For those who are not familiar with Mexican Duck, it is a monochromatic Mallard-type duck, whose distribution is centered in Mexico's northern plateau along with adjacent U.S. border states.

After consideration, three members were in favor of the split, while seven were opposed. There was almost complete agreement among NACC members that the current treatment is flawed and that the situation with Mexican Duck is not much different from that of American Black Duck, Mottled Duck, and Hawaiian Duck with respect to hybridization with Mallard. There was not, however, consensus over how best to tackle this issue, with some members seeing treatments of each of these forms as subspecies to be a more justifiable solution. Working out species limits among Mallard types is complicated by various factors including their behavior of forming pair bonds on their wintering grounds rather than on their often more distinct breeding grounds, as well as often forced copulatory behavior exhibited by them. Mallards hybridize with a great variety of duck species.

This is a much bigger topic than can be tackled here, but makes for interesting reading for anyone interested. Richard Webster's outstanding piece in *Arizona Birding*, the Arizona Field Ornithologist's

online journal, provides an essential foundation for understanding the situation. "The Status of Mottled Duck (*Anas fulvigula*) in Arizona," its title hinting at the crux of the taxonomic discord, gives the reader a much clearer picture of this biological conundrum. See: azfo.org/journal/volumes/Volume2-3.pdf

Importantly, in light of this AOS decision, eBird took the unusual step of splitting Mexican Duck in its Clements based taxonomy, bringing it in line with recent treatments by the IOC and *Handbook of the Birds of the World* taxonomies. Since eBird has generally followed the NACC decisions, this represents something of a departure and has not been without controversy.

But what does this mean for birders living in Arizona? Well, for starters it means we are faced with having to pay closer attention to those Mallard-like ducks we encounter in the field. Thankfully, there are some who have been carefully scrutinizing these various forms and can provide us with a starting point with which to work.



Female Mallard, Selbe

For identification, Tony Leukering and Steven G. Mlodinow's article "The Mexican Duck in Colorado: Identification and Occurrence" is perhaps the most complete treatment (see reference below). They go into much more detail than expressed here, but here are some basics. Mexican Ducks look somewhat like hen Mallards, with males lacking green tones to the head. Males have yellow bills and females have orange-colored bills that mostly lack the black pigments of female Mallards. Mexican Ducks lack whitish tones to the tail feathers (a feature of Mallards) and lack the curled uppertail coverts that characterize male Mallards. See: cobirds.org/CFO/ColoradoBirds/InTheScope/14.pdf

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

Habitat at Home's Featured Habitat Hacienda at the River

Kim Matsushino,
Habitat at Home Coordinator



Passion fruit vine climbing the edible garden entrance; Water feature that will house desert pupfish, Kim Matsushino

When Jason Welborn heard about the Habitat at Home program at our *Tucson Meet Your Birds* event, he immediately knew that his gardens at Hacienda at the River met all the requirements. And he was right. Completed in 2017 and spanning 7.5 acres along the Rillito River, the retirement facility is home to over 2,000 (mostly native Sonoran desert varieties) plants and trees, twelve bird feeders scattered around the property, multiple water features, and nest boxes. Hacienda at the River is an assisted living, memory care, and rehabilitation and skilled nursing community. Unique to this facility is their horticulture therapy program, which has shown to increase residents' sense of well-being while decreasing stress and calming nerves. The grounds include an edible garden, mock riparian corridor, pollinator garden, sensory garden, and beautiful water features. Efforts last summer were spent keeping plants alive in our record high temperatures.

Jason, who used to manage the Heritage Orchard at Tumacacori National Historical Park, took the job as Horticulture Guide at Hacienda at the River when it was just a dirt lot. A little over a year later, the facility has become a haven for birds and pollinators, as well as its senior occupants.

The first garden space we visit is the edible garden, an area that has become the "main hub" of the campus, where residents grow and gather their harvest. The fruits and vegetables grown are added to the menu, usually in the form of farm-fresh salads. The wrought-iron gate leading into the garden is adorned by passion fruit vines that have climbed and spread their elegance across its 20-foot walls. Once inside, you are overwhelmed by the fragrance, abundance, and variety of plants. Most impressive is the 12-foot banana tree nestled into the corner of a southeast facing wall. Due to its large size, Jason was worried that

the tree would be a nuisance for one of the residents, whose window is mainly blocked by the tree, and Jason presumed he would need to trim it down to create a view. But, to his delight, she loved it. She is from Jamaica and the banana tree was a constant and welcome reminder of home. In addition to the banana tree, there are Kino Heritage Fruit Trees: fig, pear, apple, and pomegranate. Three-foot-tall lemongrass bunches, eggplants, melons, pears, mangos, Russian sage, mint, onions, cabbage, and a sumo fruit tree are just some of the species thriving throughout the garden. Never heard of a sumo tree? Jason describes it as a "warty tangelo," whose fruit is absolutely delicious.

Separating the two main buildings is a mock riparian corridor and pollinator garden. Cottonwoods, desert milkweed, globe mallow, sacred datura, deer grass, fairy duster, and brittlebush line the corridor. Jason likes to plant globe mallow varieties, desert milkweed, and lantana for the butterflies. Desert honeysuckle and chuparosa are his favorites for the hummingbirds. All of these plants are irrigated by graywater produced from residents' sinks and showers.

One of Jason's favorite trees, Monk's pepper, is planted along the corridor. Though not a native species, Monk's pepper trees have an interesting background. They were brought over by the monks during the medieval times for their presumed libido-reducing agents. Unfortunately for the monks, the opposite was true. The berries, and, to a lesser extent, the leaves, are thought to invigorate the reproductive systems.

We progress onward to the sensory garden featuring soft plants, wind chimes, and feeders, all designed to stimulate the senses. Soft plants typically do not do well in harsh climates like ours, but nonetheless this

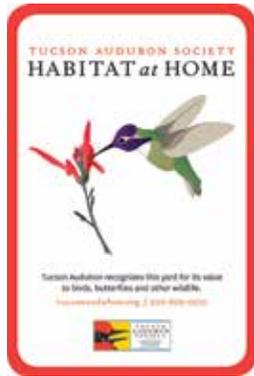
garden is a vibrant green, adorned by yellow, red, orange, and white blossoms. The fairy duster is in full bloom, showing its fiery red, tufted flowers. Next to the fairy duster are yellow bells in all their golden glory. Delicate white flowers come from the black-foot daisies quaintly placed under a handmade mosaic-tiled bird feeder. Under the feeder, volunteer millet grows tall. There is no doubt that the birds and pollinators have plenty to eat, but the supplemental feeders are a favorite among the residents. There is something calming and beautiful about being able to watch finches and hummingbirds feed outside your window.

As you enter yet another immense garden at the skilled nursing facility, your eyes are automatically drawn to the beautiful, brick water feature filled with aquatic plants and surrounded by hummingbird yucca and desert honeysuckle. Soon, this pond will be the new home to 30–50 desert pupfish, an endangered fish native to Arizona and California.

The surrounding area is adorned with more Kino Heritage Fruit Trees, and covered with Mexican honeysuckle and chuparosa.

In a little over a year, Jason has created something special. We congratulate him for making Hacienda at the River a Tucson Audubon Habitat at Home. Without a doubt, his gardens have reached the highest Cardinal level with their hundreds of native plants, feeders, graywater harvesting, nesting opportunities, and water features. We look forward to watching his gardens continue to grow and thrive, while providing comfort and joy to the residents and staff.

If you would like to see the grounds, and maybe get some ideas for your own yard, please join us as we celebrate their accomplishments on Thursday, November 8 at 4 pm. If you would like to attend, RSVP to habitat@tucsonaudubon.org.



Banana tree; Habitat at Home garden sign; Monk's pepper tree; Tucson Audubon Lucy's Warbler nest boxes, Kim Matsushino and Matt Griffiths

Habitat at Home Plant Profile: Desert Senna Lynn Hassler, Nature Shop Garden Volunteer Captain

Scientific name: *Senna (Cassia) covesii*

Family: Fabaceae (Pea/Bean)

Native range: Southern Nevada to southeastern California and Arizona, Baja California, Sonora, and Sinaloa, Mexico; 1000–3000 feet elevation; dry, rocky slopes, desert plains, and along washes; often along roadways where extra moisture collects.

Wildlife value: Blossoms attract butterflies and other pollinators; leaves feed the caterpillars of some Sulphur butterflies; seeds eaten by small mammals and birds.

This perky perennial is a show-stopper with its five-petaled, butter-rich yellow flowers in bloom from April to October. Plants grow 1½–2 feet high and sport fuzzy gray-green leaves. One-inch-long slender brown seed pods follow the flowers and persist for months, adding seasonal interest during a time when the plants are without leaves or flowers.

Desert senna is hardy to the low 20s and is not particular about soil, though it appreciates good drainage. Full sun is required for optimal blooming. Carpenter bees and bumblebees

pollinate the plants by vibrating their wing muscles while hanging upside down on the flowers; this shakes loose the pollen, which collects on their bodies.

Seeds are readily available, but you may need to visit a specialty nursery to locate one-gallon plants. I've had more luck with the latter since my backyard birds devour the seeds before they can germinate. Desert senna works well alongside cacti as it requires little water once established. The plant's compact habit and relatively mess-

free nature makes it suitable for planting along walkways, near pools, and in patio areas.



Experts in camouflage, the chrysalis looks just like a leaf.

In late August I found the caterpillar of a Sleepy Orange butterfly (*Abaeis nicippe*) feasting on one of my plants. As a gardener it takes a bit of adjustment to watch these eating machines wreak havoc on the foliage. But think of this as natural pruning! Plants generally come back stronger than ever. Birds, of course, love to feast on the juicy caterpillars—if they can find them. The caterpillars are the exact same color as the leaves. A few days ago my caterpillar positioned itself upside down on a stem and miraculously formed a chrysalis in a few short hours. Now I eagerly await the emergence of a beautiful adult butterfly.



Photos by Lynn Hassler

My Pima County Big Year, in just 365 days!

The Layman's Guide to a Successful County Big Year

Brian Nicholas



As the end of 2018 draws near, you may be contemplating a 2019 big year. My 2017 Pima County Big Year read like a multitude of disappointments, punctuated with very memorable successes. It would sometimes take over ten attempts to find one tough species, which made my eventual triumph even more satisfying. Hard-fought successes make for the best memories.

The Spotted Owl was one such species. After many unproductive mountain owling trips, I embarked on an impromptu night hike on Mt. Lemmon, hoping to hear this owl. It was a moonless night and even Great Horned Owls weren't calling. I hadn't brought a flashlight, and had to feel my way back through the darkness. As I came to the edge of a pine forest I first heard a series of toots coming from an unexpected source, a Northern Saw-whet Owl! Time stopped as I listened, cherishing the moment, and creating an unforgettable experience. That one night made the whole year worthwhile.



I would eventually hear not one, but three, Spotted Owls one fateful summer night when the stars aligned in my favor. Another tough bird was the Gray Catbird, only seen after I sat and waited for over an hour along the Tanque Verde Wash, where it was first discovered by Keith Kamper. Many hours searching for rarities at the Las Cienegas National Conservation Area seemed pointless until a Yellow-throated Warbler appeared high in the cottonwoods. A female Painted Bunting at the nearby Cottonwood Tanks was another highlight for the year.

Having a successful big year is all in the details, meaning that every species counts. Finding rare birds on your forays will definitely boost your species total, but finding all residents or yearly visitors can be just as challenging. Below are some tips to help you achieve a successful Pima County Big Year.

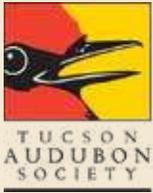
- Start on day one, focusing on rarities seen at the end of the previous year. After rarities, winter residents—Mountain Bluebird, Townsend’s Solitaire, Long-eared Owl, Williamson’s Sapsucker, etc.—are the next priority.
- Review eBird Bar Charts for outlier species, such as rare residents and quick migrants or breeders (Common Nighthawk, Common Black Hawk, Thick-billed Kingbird, LeConte’s Thrasher, Elegant Trogon, Sulphur-bellied Flycatcher, Rufous-capped Warbler, Indigo Bunting, and Vaux’s Swift). Look for migration trends or best months for sightings. Click on the maps for details on individual species.
- Know your one-day wonders and give them top priority, especially gulls and terns. Sabine’s and Heermann’s gulls were highlights of my year.
- Find as many birds as possible before the Spring migration rush.
- Use uneventful early summer months to fill in bird gaps, especially warblers, owls, and rare hawks.
- Record your Big Year in eBird. It is a great tool for looking back on your memories. Include photographs and recordings when possible. Documenting helps to ensure the accuracy of your sightings, and photos can bring out field marks not seen during the initial observation.
- In eBird, sign up for Target Species updates for your county (daily or hourly options). Check eBird Rare Bird Alerts multiple times throughout the day.
- Receive updates for the AZNM listserv and follow Arizona Birding on Facebook. These resources will show many rarities before they reach eBird. Share your rare sightings as well.
- Make seasonal wish lists using eBird Bar Charts. It will help focus your efforts.
- Explore your mountains. Mt. Lemmon contributed 44 species in my 2017 big year!
- Set up a backyard bird habitat and feeders. My first Rose-breasted Grosbeak was in our yard!
- Visit under-birded areas with potential. You can add species not just to your own list, but to the Pima County overall species list.
- Join Christmas Bird Counts. They’re fun and you can find useful information on new rarities during compilation dinners. You may even find one yourself!
- Expect the unexpected. Anything is possible!

In 2017 I recorded 328 species, just under 90% of total species seen in Pima County. Even with my best efforts I missed 1 in 10 species seen! The success of your big year will be a combination of individual triumphs, which will add up to many treasured memories at year’s end. Good luck in your quest!



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

Opposite page: Mountain Bluebird, Muriel Neddermeyer; Elegant Tern, Meggs; Yellow-throated Warbler, Muriel Neddermeyer; Sulphur-bellied Flycatcher, Mary Zalokar



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BHUTAN—BIRDING THE BUDDHIST KINGDOM

Dates: March 16–April 4, 2019

Price: \$7550

Leader: André Bernon & David Erterius
Spaces Available: 8

Our fabulous Bhutan birding tours traverse the breadth of this remarkable country. A number of Bhutanese birds are extravagant and unlikely to be encountered outside of this pristine Kingdom. Some of our targets include Himalayan Monal, Satyr Tragopan, White-bellied Heron, Ibisbill, Ward's Trogon, Fire-tailed Myzornis, and Beautiful Nuthatch.

ECUADOR—NORTHERN: CHOCÓ CLOUD FOREST I

Dates: April 5–11, 2019

Price: \$2250

Leaders: Dušan Brinkhuizen
Spaces Available: 6

This classic tour covers all the important birding sites found northwest of the capital city of Quito. This area is part of the Chocó bioregion, which hosts a great number of endemics and specialties: Andean Cock-of-the-rock, Giant Antpitta, Plate-billed Mountain Toucan, Toucan Barbet, Orange-breasted Fruiteater, and Velvet-purple Coronet, to name a few.



Orange-breasted Fruiteater, Dave Curtis

Solipaso Tours solipaso.com

MONARCH BUTTERFLIES AND BIRDS

Dates: February 17–24, 2019

Price: \$3050

Leader: David MacKay

Over 20 million monarch butterflies make their amazing migration of more than 2000 miles from Canada and the United States to a small area in the mountains in the highland pine forests of Michoacan and the Estado de Mexico. Each year, a unique generation of these extraordinary butterflies discovers the same place as past migrations. It's a marvel of nature that is not to be missed! There are several sanctuaries that protect these forests and we'll visit two of them. In addition, we'll visit the Lerma marshes, where we seek the beautiful Black-pollled Yellowthroat, then make our way to the beautiful Valle del Bravo. We'll also spend some time birding around the Lake Patzcuaro region for some central Mexico endemics. Trip starts in Mexico City and ends in Guadalajara.

TRINIDAD AND TOBAGO

Dates: June 14–23, 2019

Price: \$4050

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, Red-legged Honeycreeper, Red-capped Cardinal, Speckled Tanager, Oilbird, Collared Trogon, and so many more beautiful birds! Along with birding in many different habitats, we enjoy a stay at the wonderful Asa Wright Nature Center, where the veranda birding is world class! Another highlight is staying at the beach in Grande Riviere during the season when Leatherback Turtles come to lay their eggs... an amazing sight to witness. Bluewaters Inn in Tobago is another gem and the boat ride out to Little Tobago to see the nesting colony of Red-billed Tropicbirds a great adventure.

Conservation News

El Rio Preserve Update *Janine Spencer-Glasson*

The Town of Marana has complete engineering and landscaping plans for El Rio Preserve. A request for bids for landscaping along the southwest corner of El Rio, near the parking lot, will be advertised in the next 2–3 months. This upland area can be revegetated prior to bank protection because it is unlikely to flood. The bid request will include the turnout from Cortaro-Marana Irrigation District to provide water for ponds in the future.

The riparian restoration project has to be phased because it will cost approximately \$2M to complete the entire master plan. The Town of Marana just submitted a grant proposal to help fund removal of invasive species and planting natives, with water harvesting basins and a drip irrigation system.

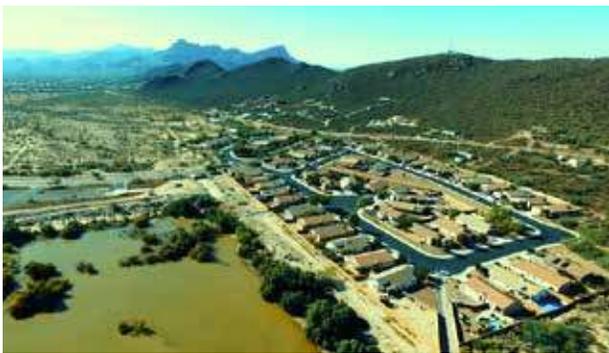
Much of the work will have to wait until Pima County Flood Control District completes bank protection that will exclude floods of up to 25-year events. Bank protection is needed to avoid heavy

flooding, sedimentation, invasive plants, and mosquitoes. The bank protection project is estimated to cost about \$1.5M. The design will be initiated this fall and will take approximately one year. Then construction will take another 12–18 months. These things take time—to fund, to obtain all of the needed permits, and to construct!

Tucson Audubon Society has submitted a monitoring plan—to begin one year prior to riparian restoration, and two years after—to ensure success and to provide input on anything that needs to be revised in the management of the site and plants that may need to be replaced. We may be looking for volunteer birders in the future. An IBA survey site perhaps?

The area is currently filled with flood water from the Santa Cruz River, and we are awaiting the return of ducks and other waterfowl this fall.

Janine Spencer-Glasson is the recently-retired Environmental Projects Manager for the Town of Marana and a local birder.



Clockwise from top: El Rio Preserve, Nicole Gillett; Pollinator garden installed at El Rio by Tucson Audubon, Nicole Gillett; Pond at El Rio, Nicole Gillett; Drone shot of El Rio Preserve looking southwest, Janine Spencer

Between Tucson and Tuscany: Unlikely, Unwise and Unsustainable — The Villages at Vigneto

Keith Kamper

Stretching from the Apennines to the Tyrrhenian Sea, Tuscany's lush landscapes and rich cultural and artistic heritage present an irresistible draw to discerning world travelers. Its history, vibrant and varied, spans the time of the Appennini and Villanovans, the Etruscans to Romans. The inhabitants weathered the Medieval Period and gave birth to the Renaissance. The Modern Era up to the present has seen many changes, challenges, and a continued out-sized impact on the world of art and architecture. Yet, as an ecophile, my thoughts turn to the diversity of species that inhabit the sandy beach coasts, rocky cliffs, and high headlands adorned with verdant, thirsty Mediterranean vegetation.

Close your eyes and imagine the rolling, startlingly green hills of Val d' Orcia and fields of sunflowers as far as your eye can see. The changing seasons, pleasant in summer, colder in winter, give the land a freeze-thaw cycle to build the soil that will soak up nearly 36" of rain a year. Imagine now that you are living in a village that has it all: golf courses, restaurants, parks, social clubs, lakes, and vineyards. Limitless amenities, lush evergreen vegetation, and unbridled adventure. A place where if you can think it, you can do it. Now imagine that this village is near Benson, Arizona. Say what?

This idyllic existence is exactly what El Dorado Benson, LLC, asks us to envision when thinking of its proposed mega-development it is calling "The Villages at Vigneto—Tuscan Territorial." Please do not get me wrong. I like Benson. Located along the life-giving San Pedro River, the location is hard to beat. Nestled in that birder and nature lover's paradise that is southeast Arizona, incredibly rich diversity exists here, drawing visitors from around the globe. The human history is equally fascinating—people have been traveling and living in the river basin for over 13,000 years. I contrast this

region with Tuscany in the area that matters most in the arid southwest. That area is rainfall. Benson receives on average 13.88 inches of rain annually, nearly two feet less than Tuscany. Factor in the drought, which plagues Arizona now, and the very real threat of increased temperatures and decreased rainfall predicted due to climate change, and Arizona is on a dangerous path. Despite this, the political will to pass comprehensive legislation to protect our water appears to be lacking.

The development seeks to build 27,760 new homes, commercial developments, golf courses, parks, clubhouses, athletic fields, vineyards, lakes, orchards, resorts, medical facilities, and more. An extensive road system will be required, altering the flow of storm runoff, causing erosion and flooding, and destroying habitat. An expansion of utilities to support up to 70,000 new residents will be significant. This dramatic increase in population would be detrimental to the surrounding environment, with the potential to significantly alter the San Pedro River ecosystem.

Vigneto would be located near, and affect, multiple critical natural areas. Its proposed site is at the base of the Whetstone Mountains, which is part of the Coronado National Forest and has been home to El Jefe, one of the only Jaguars known to have been in the United States in recent history. The Lower San Pedro River Global Important Bird Area, the San Pedro Riparian National Conservation Area (SPRNCA, the nation's first global IBA), the St. David Cienega, and the world-class wet cave complex at Kartchner Caverns State Park are all in close proximity to the proposed development. These all-important tourists' destinations and conservation areas rely upon having enough good quality water to be sustained.



The healthy San Pedro riparian ecosystem, Nicole Gillett



The green ribbon across the landscape—The San Pedro River, Nicole Gillett with Light Hawk

The hydrology of the area is devilishly complex, requiring more study to fully appreciate and understand the consequences of our actions when altering the river system and aquifer. Approximately 800 acre-feet per year of ground water is currently pumped from this area. If Vigneto becomes a reality, that figure could increase to as much as 13,000 acre feet per year, exacerbating the already unsustainable ground water depletion, which could ultimately reduce surface and subsurface streamflow in the San Pedro River. The incredibly rich biodiversity of the river basin, water users downstream from the development, and the long-term economy would be jeopardized by such a large-scale development.

Many of you are well acquainted with the importance of the San Pedro River, the last major undammed desert river in the American Southwest. Each year in spring and fall, millions of migrating birds use this riparian corridor to fuel up on their journeys. Fortunate birders might spot the Southwestern Willow Flycatcher, a subspecies of Willow Flycatcher that has been listed as endangered under the Endangered Species Act in 1995. The wooden-knocking of the enigmatic and threatened Western Yellow-billed Cuckoo is heard here during its breeding season. The river also has two formally designated “globally important bird areas”, IBAs, recognized by the American Bird Conservancy. Other species that depend on the healthy riparian habitat of the San Pedro include over 80 species of mammals, including the endangered jaguar and beaver; 14 species of fish including Gila chub and desert sucker; and more than 250 species of migratory birds and over 100 species resident birds. Ornithologists have estimated that 45% of the 900 total bird species in North America use the San Pedro at some point in their life.

The San Pedro is vitally important to humans as well. People in Sierra Vista, Fort Huachuca, Benson, Tombstone, San Manuel, Bisbee, and Mexico rely upon surface and ground water from the river for use in municipal, agricultural, and mining operations. Benson is especially dependent upon that water for agriculture.



The unfinished neighborhoods that already dot the Benson area—will construction really lead to dramatic changes to the economy? Nicole Gillett with Light Hawk

So important is the river to Benson that its General Plan states: “The San Pedro River Corridor has been identified as one of the community’s highest priorities.” However, the Benson City Council approved the formation of ten separate taxing districts in a 5–0 vote (2 council members absent) near the beginning of 2018, eliminating the last local hurdle to development. But it is not yet over.

Few will wonder why a mega-development in such a sensitive area could come this close to happening. The answers are familiar: the potential for shortsighted profit, jobs, and an increased tax base. For the how, we will have to go back about twelve years. In 2006, the Army Corp of Engineers (ACE) granted a Clean Water Act (CWA) Section 404 permit to Whetstone Ranch to build up to 20,000 houses on 8,000 acres. The CWA Section 404 permit “regulates the discharged or dredged material into the waters of the United States.” Thus, this permit is required for projects like this. An extensive permit review process is supposed to take place to ensure that the nation’s waters are not significantly degraded, as well as to determine if other alternatives exist. Due to the housing and lending bust of 2007–2008, this development never happened and the land was sold to El Dorado Holdings, LLC (locally El Dorado Benson LLC). The permit was then transferred to El Dorado, which then proposes to build 27,760 houses on 12,324 acres. This represents not only a different company, but also a different, larger project. Upon careful review, the original 404 permit process was found to be inadequate by many environmental groups.

In addition to the previously mentioned threats posed to the two IBAs, the SPRNCA, Kartchner Caverns, and the Saint David Cienega, Vigneto also may pose a risk to EPA-designated Aquatic Resource of National Importance (ARNI). Another contention raised is that the permitting process neglected to consider wildlife linkage and habitat connectivity. A glaring flaw that should drop jaws is the failure by Whetstone Ranch, Eldorado, or the ACE to consult with the United States Fish and Wildlife Service (USFWS) regarding the potential impacts to migratory birds, and threatened and



Southwestern Willow Flycatchers rely on the San Pedro River for survival, Muriel Neddermeyer

endangered species. The new interpretation of the Migratory Bird Treaty Act, in which only the intentional act of taking a bird is covered, make this even more troublesome.

With many meetings, studies, and machinations in between, in May 2016, Earth Justice filed a lawsuit in U.S. District Court on behalf of Tucson Audubon Society, the Center for Biological Diversity, Sierra Club, Maricopa Audubon Society, Cascabel Conservation Association, and Lower San Pedro Watershed Alliance. The lawsuit says the ACE and USFWS are required by the Endangered Species Act to formally consult on how the development could affect federally protected species and their habitat. Two additional species—the Western Yellow-billed Cuckoo and the northern Mexican garter snake—have been listed as threatened since the permit was issued over a decade ago. The decision is said to be coming soon and it is my hope that the courts side with the environmental groups. While the courts are often the last resort, progressive legislation is sorely needed to protect our environment and water from over-zealous development.

Effective bills that sought to consider ecological water did not gain traction during the 2018 Arizona Legislative session, however; on a positive note, several potentially detrimental water-related bills met a similar fate. Two bills that did pass were SB 1493 and SB 1494. Both have major implications on future development and the protection of the environment and water resources. Together, the bills give authority to the Arizona Department of Environmental Quality (AZDEQ) to move toward assuming the responsibility

for Clean Water Act 404 permitting process as well as the Underground Injection Well Permit Program. Tucson Audubon will continue to be part of stakeholder meetings on this recent and dismaying development. The future implications of this on Vigneto, if any, are at this time unclear to me.

Inarguably, The Villages at Vigneto would create jobs, some short-term, others long-term. It would also increase the tax base for Benson. The potential for ecological damage is present if this unsustainable mega-development moves forward. If the riparian ecosystem is degraded, ecotourism that injects millions into the local economy, and provides many sustainable jobs, could be impacted. The erosion of ecosystem services (potable water, ability to grow food, recreation, and more) that the river freely provides becomes more likely if Vigneto and many of the other proposed developments are built.

I recall my first visit to the San Pedro in the early 90s. Driving from Sierra Vista, mountains and a strip mall giving way to a sea of yellowing grass. Then a ribbon of another color in the distance becoming clearer. Towering Fremont Cottonwoods, even in the distance appearing impossibly large—and a rich green I would not associate with the desert southwest. Vibrant, shocking, the audacity to be filled with life and life giving was profound. This sight, the feelings it evoked, I hope, will be encountered by generations to come. Our legacy needs not be the one that denies this.

Keith Kamper is an avid birder and long-time volunteer with Tucson Audubon.

SPRNCA Resource Management Plan

The Bureau of Land Management (BLM) is completing a Resource Management Plan for the San Pedro Riparian National Conservation Area (SPRNCA) this fall. Many birders are familiar with SPRNCA for the excellent and unique birding the protected riparian habitat offers. SPRNCA was one of Arizona's first Important Bird Areas and one of only two Riparian National Conservation Areas. In short, it is special and continuing to protect the area is absolutely critical.

As a long time participating stakeholder, Tucson Audubon submitted joint comments with Audubon Arizona and The American Bird Conservancy highlighting the importance of the IBA and uniqueness of the riparian habitat. Of particular concern is the BLM's plan to increase the land open to livestock grazing on the SPRNCA. Tucson Audubon questioned the motives and science behind opening any land on the SPRNCA to grazing. There is no scientific basis to assume that grazing will improve the sensitive habitat and, on the contrary, all evidence points to grazing degrading the riparian corridor, furthering mesquite encroachment and lowering the economic impact which activities such as birding and wildlife watching have on the surrounding communities. You can learn more about the SPRNCA and how to get involved on our website.



SPRNCA, Kendall Kroesen

TUCSON AUDUBON NATURE SHOP

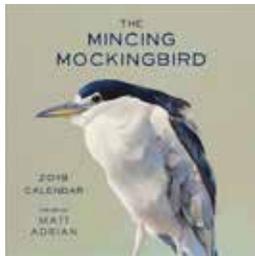
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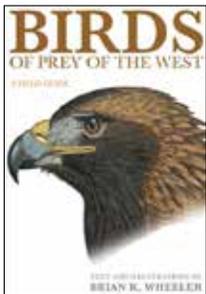


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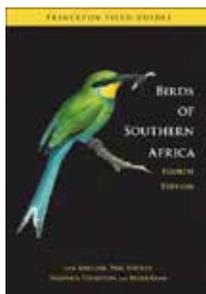


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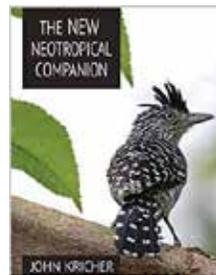
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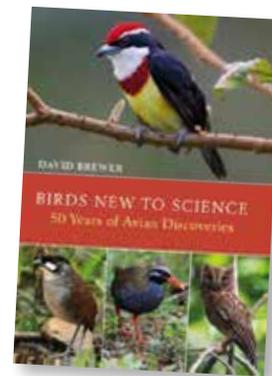
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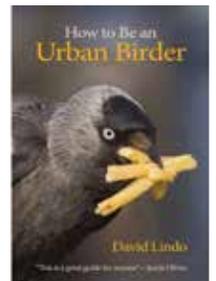
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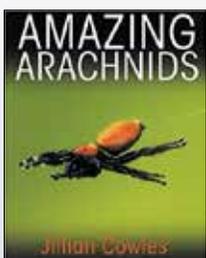


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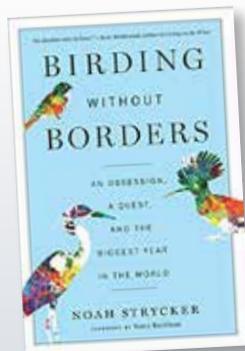
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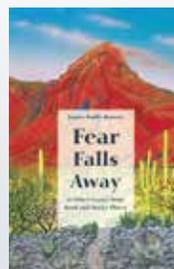
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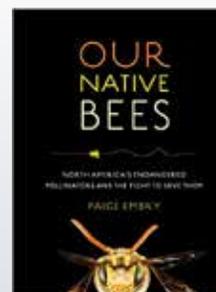
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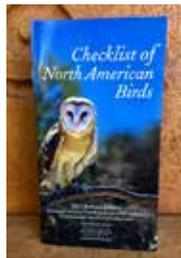


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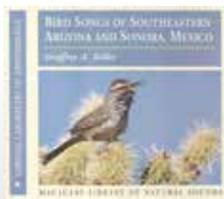


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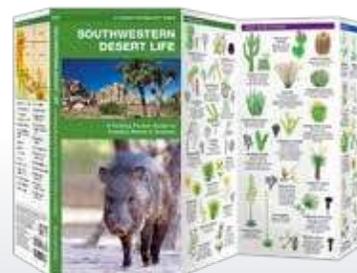
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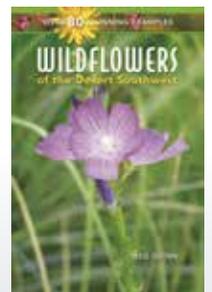
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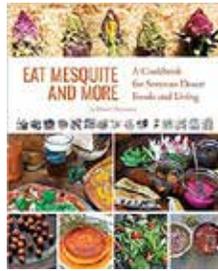
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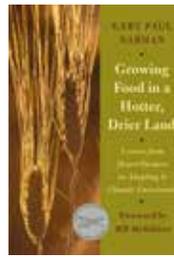
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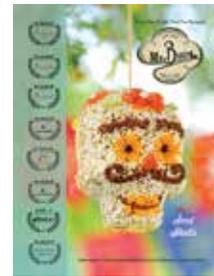
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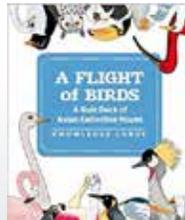


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BOOK REVIEW

Please Try This at Home

A review by Rick Wright

The past year has seen a small explosion in intelligently-written books about evolution for the educated layperson. Fully deserving of the praise that has been heaped upon them, David Quammen's *Tangled Tree*, Michael Ryan's *Taste for the Beautiful*, and Rick Prum's *Evolution of Beauty* all owe their considerable and surprising success in part to the authors' refusal to limit their discussion to manakins and monkeys. Each of these books has a great deal to say about how we modern humans fit into the great tree of life, and how our own behaviors have developed in response to the same selective pressures that have molded other, lesser creatures as well.

The artist and writer Katrina van Grouw's splendid new volume also puts people firmly at the center of the story—but in a very different way. In clear, accessible prose, van Grouw tells the story of the development of evolutionary theory and the critical integration of genetics into the study of life; along the way, she introduces us to such important and justly famous historical figures as Wallace, Darwin, and Mendel. Where this book departs, fascinatingly, from others on the subject is in its examples, virtually all of them drawn from a group of organisms most of us rarely think of: domestic animals.

We all know Darwin's finches and his barnacles, but it is easy to forget that it was his study of the breeding of domestic pigeons that led to some of the most crucial insights in his work. Van Grouw's own interest in the selective breeding of domestic animals will be familiar to readers of her earlier book, *The Unfeathered Bird*, in which the more grotesque forms of the common barnyard duck play so memorable a role; here, in *Unnatural Selection*, she broadens her scope to include pigeons, gerbils, canaries, dogs, budgies, cats, chickens, pigs, and on and on, all "created" by humans acting as usually unknowing agents of evolutionary selection.

Van Grouw illustrates her text with large-scale drawings of her subjects, both alive and in the flesh, and, evocatively, as skulls and articulated skeletons. The charming image of an English

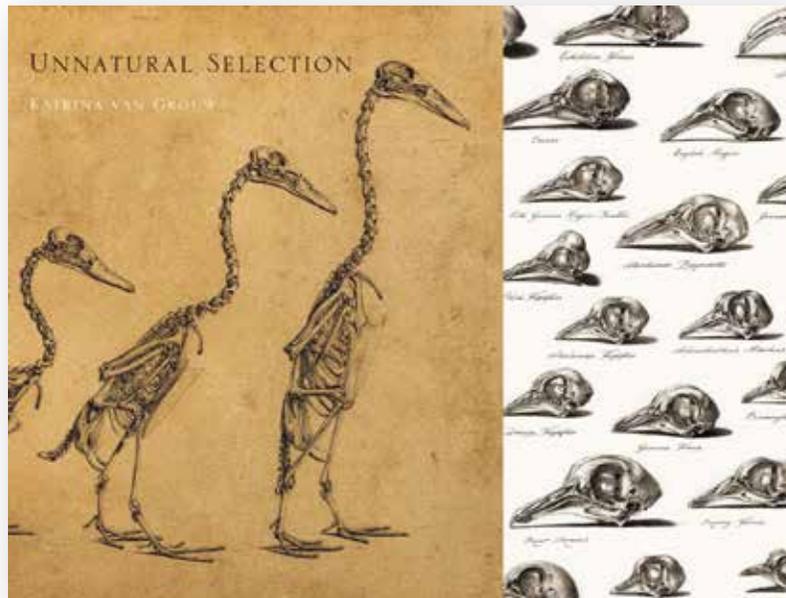
lop rabbit, gazing gently out from the page, contrasts with a delightfully creepy spread of thirteen skulls of crested mallards. With its generous format and abundant illustrations, this book might seem to be for leafing through, but you will inevitably find yourself reading it. As appealing as they are instructive, the pictures inexorably draw even the most casual of coffee table book page flickers into the text, searching for more information about, for example, the connection between islands and taillessness in

house cats or the breeding methods required to produce chicken feathers of just the right length and texture for fly tying.

For most of its length, *Unnatural Selection* is about what happens after the human/animal relationship has been established and selective breeding can begin. The book ends though, with a short postscript of a chapter about the history and the future of domestication. Just how animals, especially dogs, were first brought into human society is still a matter for vigorous debate, but van Grouw

argues convincingly for a gradual rapprochement between people and wolves rather than the abrupt introduction of pups into human households. The capacity for domestication, she writes, is itself a heritable genetic trait, passed from one docile generation to the next, and it has always been the animals possessing that particular trait that have entered into the symbiosis of domestication.

Few are the books that can be recommended with equal enthusiasm to birders, dog owners, biology students, poultry breeders, and the merely (merely!) curious, but *Unnatural Selection* is one of them. No matter what your interest, this book, with its sophisticated but accessible text and its captivating illustrations, will be one of the highlights of your reading year.



Unnatural Selection by Katrina van Grouw
Princeton University Press 2018
304 pages, hardcover—\$45

Rick Wright leads bird and art tours to Europe and Central America for Victor Emanuel Nature Tours. Rick is also the author of five books, including the ABA Field Guide to Birds of Arizona; his Peterson Reference Guide to North American Sparrows will be published this fall.



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Vermilion Flycatcher

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