



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

Tucson Audubon Society

300 E. University Blvd. #120, Tucson, AZ 85705 629-0510 (voice) or 623-3476 (fax) All phone numbers are area code 520 unless otherwise stated.

TUCSONAUDUBON.ORG

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Tucson Audubon Nature Shops

300 E University Blvd #120 ext 7015 Hours: 10 AM-4 PM, Mon-Sat

Agua Caliente Park, 12325 E Roger Rd 760-7881 Hours: 10 AM-1:30 PM, Thu-Sat Please call to confirm hours. Shop opens earlier and closes later during certain months. Nature Shop space generously provided by Pima County Natural Resources, Parks & Recreation.

Tucson Audubon Nature Centers

Mason Center

3835 W Hardy Rd, Tucson, AZ 85742
Open most weekdays 9 AM-5 PM or when chain is down.

Paton Center for Hummingbirds

477 Pennsylvania Ave, Patagonia, AZ 85624

Vermilion Flycatcher is published quarterly. For address changes or subscription issues call 629-0510. Submissions are due the 1st of the month, one month before issue date. Send submissions as Microsoft Word, RTF, or plain text files to Matt Griffiths at mgriffiths@tucsonaudubon.org.

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FRONT COVER: Sandhill Cranes by David Quanrud. David is an environmental research scientist and teacher. View more of his avian and wildlife images at flickr.com/photos/quanrud.

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

Change of Life Peter Salomon

The Tucson Audubon Society changed and enriched my life! Because of its field trips offering enthusiastic and knowledgeable guides and its helpful and friendly members, I started on a journey to become a birder.

I was never previously interested in birds, being a tennis player and then a hiker, until on a trip to Yellowstone in 1994 when my friend, and now birding buddy, John Mueller pointed out a gregarious gray and white bird at our picnic table. He pulled a Peterson's *Birds of North America* out of his knapsack and showed me a simple line drawing of a Clark's Nutcracker. That such a "simple" drawing could capture the likeness of this bird intrigued and amazed me.



After returning to Tucson, a Tucson Audubon field trip led by John Higgins had me hooked. I subsequently went on these field trips as often as possible. The guides were great, the participants were wonderful company, and I learned all about birding, habitats, nature, and how to stay behind the leader. Local trips were followed by Tucson Audubon journeys to the Salton Sea and Mexico, and a Wings trip to Monterey. I joined the Rare Bird Alert (RBA) telephone chain and became a semi-serious lister for the ABA area and then Arizona. I joined the Tucson Audubon board of directors and have supported this organization enthusiastically. Now, whenever I go on vacation anywhere in the world, I always bring my binoculars and plan ahead for birding spots and opportunities.

Tucson Audubon has an abundance of unique aspects and birding resources that are not replicated by any other organization in Southern Arizona: its numerous free field trips, its comprehensive weekly RBA, and its constantly updated *Finding Birds in Southeast Arizona*.

Though my knees and back have aged, I still pursue and enjoy birding. I thank Tucson Audubon for all it has done for me and for the birding community in Southern Arizona, the US, and the world.

Peter Salomon is a retired pathologist from New York City. After college, medical school, an internship and residency in the east, he moved to Tucson in 1972 where he practiced until he retired 10 years ago. He has been a birder for the last 20 years.

"Out of our abundance, you touch birds in astonishing ways..."

Karen Fogas, Executive Director

I love the above statement. It perfectly describes my experience of the last six months as I learn about the many ways you—the Tucson Audubon Society—make this statement come to life.

As volunteers, you range from helping beginning birders learn to use binoculars to surveying remote canyons for rare, threatened species. You clean debris from the paths at the Mason Center in the summer when the heat is doing its best to discourage all but the hardiest from the desert. You tend the garden at our Nature Shop, a little mecca in the city for birds, butterflies, and lizards. You teach. At the Festival, 107 of you generously gave your time in every imaginable way to let people from all over the world enjoy the unique and incredible gifts that southeast Arizona has to offer—especially its birds. And you write letters that speak for things that have no voice of their own.

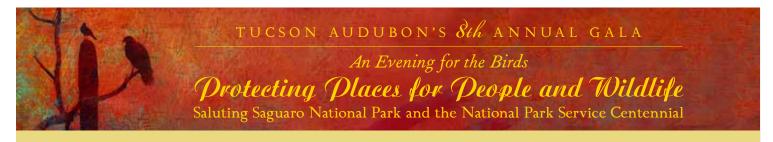
The abundance of expertise and skills you share with us opens doors to helping birds in big, impactful ways. This summer, retired scientists, soccer moms, high school students, and many others surveyed hundreds of acres for Western Yellow-billed Cuckoos. Your work may well lead to the protection of critical habitat in places that would previously never have been considered essential to this elusive bird. You give us the capacity to respond to requests that may help determine the future of bird species as changes in climate, long drought, and the wants and needs of humans change the landscape and all that lives upon it.

The abundance of your financial gifts is an essential tool in our work. In the last few months, I have had the privilege of sitting down with many of you who support Tucson Audubon's work financially. I feel awed by your incredible generosity and motivated by the responsibility you place in our hands for turning your dollars into the incredible array of ways Tucson Audubon galvanizes people to experience and protect birds. Our continued partnership allows us to achieve shared goals on behalf of birds and wildlife.

The abundance you provide, combined with the abundantly talented staff team at Tucson Audubon, is the means by which we connect people to birds and to the natural world around them. There is no more important time, nor more important charge, than to teach people to care for the world around us, because by doing so, we ultimately care for and protect ourselves. But you know all that! And you trust us to be your voice and to be your hands in this important work.

So often not-for-profit entities focus on our seemingly never-ending needs. Today, Tucson Audubon focuses on the great abundance you make possible, for by doing so, you touch birds in astonishing ways.





The National Park Service is celebrating its Centennial on August 25, 2016. There will be many events around the nation to celebrate the history of America's national parks and the path to stewardship over the next 100 years. In recognition of the magnificent park in our area, we are honoring Saguaro National Park at our 2016 Gala. On that evening, we will hear from Darla Sidles, Superintendent of the Park, as well as from our keynote speaker, Nancy Laney, a native Tucsonan who served as Executive Director of Tucson Botanical Gardens and Associate Director of the Arizona Sonoran Desert Museum. Come join us in a celebration of Saguaro National Park and all that it has done to enhance the lives of the people and birds of our region!

SAVE THE DATE

Tuesday, February 9th, 2016 Hilton El Conquistador Resort 10000 North Oracle Road · Tucson, Arizona 85704 2016

National Park Service
CENTENNIAL

LETTERS TO THE EDITOR We want to hear from you! Help us institute our new Letters to the Editor section of the Vermilion Flycatcher. Send your feedback, comments or questions to Matt Griffiths at mgriffiths@tucsonaudubon.org

TUCSON AUDUBON EVENTS AND CLASSES

Live and Learn with Tucson Audubon!

TUCSON AUDUBON BIRD EDUCATION PROGRAM

Become a birder or improve your birding skills through a suite of courses offered at Tucson Audubon. Our courses are designed to take you through a natural progression from a beginning to an intermediate/advanced birder, transporting you to some of the most beautiful locations throughout our region along the way. Below, you will find our courses listed by birding level.

Become a Tucson Audubon Society member and save!



ALL LEVELS

GARDENING TO ATTRACT BIRDS

October 10, 10:00 am-12:00 pm, \$25

Learn how to provide for birds the natural way by using plants that offer seeds, fruit, and nectar, as well as cover and shelter. Lynn Hassler, a naturalist, writer and gardener, will teach you how to create desert-friendly gardens that support birds and help make up for lost habitat.



BEGINNER

BACKYARD BIRDING AND BEYOND

Saturdays, February 6-March 5; Classroom 10:00 am-12:00 pm; Field trips TBD, \$185/ \$150 member discount

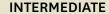
Learn why southeastern Arizona is such a great place for birds and why bird watching is so much darn fun! Taught by Lynn Hassler, this course is designed for beginners and will address how to separate birds out by habitat, seasonal occurrence, and behavior. Learn about field marks and vocalizations and get the lowdown on binoculars and field guides, birding vocabulary, and etiquette in the field. Participants will learn how to identify local birds and discover some of their interesting characteristics and charms. We'll also cover some of the adaptations birds have developed in order to survive in our challenging environment.



BIRD ID: SHARPENING YOUR IDENTIFICATION SKILLS

March 24, 26, & 31, April 2: Thursday classes, 5:30-8:30 pm; Saturday all-day field trips TBD, \$185/ \$150 member discount

A perfect follow-up to Lynn Hassler's Backyard Birding and Beyond, this workshop will expand upon basic skills for identifying birds. You will become better with identification by learning important terminology; recognizing size, shape, and structure; and understanding plumage, patterns, and colors. The details of identification are discussed with a "big picture" perspective. Taught by Homer Hansen, the workshop will have two one-day field trips to practice the techniques learned in the classroom.



All workshops taught by Homer Hansen at the Tucson Audubon Main Office unless otherwise specified. Thursday's classes are from 5:30-8:30 pm and Saturday field trips are TBD. \$145/\$110 member discount

SPARROWS SPECIALTY WORKSHOP

February 4 & 6, 2016

RAPTORS SPECIALTY WORKSHOP

February 11 & 13, 2016

BIRDING BY EAR

April 14 & 16, 2016



REGISTRATION INFORMATION

See tucsonaudubon.org/education, or contact Sharon Long at slong@tucsonaudubon.org or call 520-629-0510 x7011

EVENTS CALENDAR



Join us this fall for: **OktoBIRDfest**

OKTOBER 22, 5:30-7:30 PM, **MASON CENTER**

German and autumn themed bird fun for all. Beer, brats, tofu-pups, soda, & pretzels for a small donation. And a special shout out to all Tucson Bird & Wildlife Festival volunteers!

Follow our weekly emails for more info, or go to tucsonaudubon.org/calendar to RSVP.



at Tucson Audubon

SUNDAY, NOVEMBER 1 10 AM-3 PM

Cyclovia is a community event hosted by Living Streets Alliance. For one day, Tucson shuts down 2.6 miles of public streets to be used only by cyclists and pedestrians. Join us at the University Blvd. Nature Shop on the Midtown Cyclovia Route for a day of fun for the whole family! There will be food trucks, live birds, live music, a climbing wall, and much more! Details at cycloviatucson.org.

October 3: Seven Saturdays in Patagonia

October 5: Living With Nature (Tucson)

October 10: Gardening to Attract Birds workshop

October 22: OktoBIRDfest, Mason Center

October 23-25: SAHBA Home Show

November 1: Cyclovia

November 6-10: Birds, Plants, Culture and

Bacanora Along the Rio Sonora

November 7: Living With Nature (Green Valley)

November 9: Volunteer Shindig!

November 14: Build Your Own Nest Box

November 16: Living With Nature (Tucson)

November 16-21: Nature Shop Holiday Sale

November 28: Seven Saturdays in Patagonia

December 5: Living With Nature (Green Valley)

December 7: Annual Member Holiday Potluck

January 10: Living With Nature (Green Valley)

December 12: Build Your Own Nest Box

January 11: Living With Nature (Tucson)

January 23: Living With Nature (Oro Valley)

February 9: Tucson Audubon's 8th Annual Gala

Migrate South of the Border with a Fall Tucson Audubon Trip

BIRDS, PLANTS, CULTURE AND BACANORA ALONG THE RIO SONORA

NOVEMBER 6-10, 2015

The rich natural and cultural history of Rio Sonora waits just beyond the border. From ranchos steeped in tradition to riparian habitats filled with birds, this is a trip not to be missed.

Our guides are Lynn Hassler, well-known birder, author and naturalist, and Jesus Garcia, native Sonoran and educational specialist at the Arizona-Sonora Desert Museum. Lynn is especially familiar with the birdlife of our border region and has served as Director of Education and Director of Horticulture at the Tucson Botanical Gardens. Jesus, who serves on the Tucson Audubon Board of Directors, is also one of the founders of the Mission Garden and the Heritage Fruit Trees project.

Our trip begins with two nights at Rancho Cerro Colorado, a working ranch and 40,000-acre nature preserve outside Cananea noted for its pristine habitat and rich biodiversity. Next we're off to Banamichi for two nights, a lovely colonial town nestled along the Rio Sonora where the slow-paced atmosphere and rural sensibilities that once were prevalent throughout Mexico can still be found. We will stay in the lovely Posada del Rio, enjoying day trips along the river valley to the communities of Aconchi, Baviacora, Huepac and Arizpe.

Come experience the Rio Sonora with us, from birds to bacanora, for what promises to be an enriching, enchanting, and energizing five-day trip. See tucsonaudubon.org/fieldtrips for full details.

Cost: \$1350 per person for members; \$1425 for non-members











Build Your Own Nest Box!

Fall through early winter is the best time to hang nest boxes in your yard so they will be ready when birds are searching for a place to nest in late winter or spring. There are two nest box assembly workshops currently scheduled (we will schedule more if there is enough interest):

November 14

Saturday, 9:00-11:00 am University Blvd. Nature Shop Courtyard

December 12

Saturday, 9:00–11:00 am
Tucson Audubon's Mason Center

At each workshop, you will be able to assemble a box for Lucy's Warbler, Ash-throated (or Brown-crested) Flycatcher, or Western Screech-Owl. Tucson Audubon staff and volunteers will be on hand to help you. We provide the kits—no experience necessary.

The cost of the workshops is \$20 for the Lucy's Warbler box (small), \$25 for the Flycatcher box (medium) and \$30 for the Screech-Owl box (large). These prices are significantly lower than buying a pre-assembled box and reflect the cost of putting together the kits from which we work.

If you would like help deciding which box is most likely to be successful at your location, contact Tucson Audubon's Urban Program Manager, Kendall Kroesen, at (520) 209-1806 or kkroesen@tucsonaudubon.org.

To register, go to tucsonaudubon.org/education, click on the "Beyond Birds" link, find the workshop you want, and follow the instructions.



Living with Nature Monthly Program

Join us for our free monthly program! These public presentations seek to inform, educate, and entertain. We invite speakers who are experts in their fields to present on a variety of topics related to birds including their biology and ecology; global, regional, and local birding hot spots; and conservation issues that affect birds, other wildlife, and their habitats. This season in Tucson, we will have a social gathering from 6:00–6:30 pm, followed by Tucson Audubon news, rare bird alerts and our featured speaker. We've also added a new northwest venue in Oro Valley at the Western National Park Association.

TUCSON

All lectures will be held in the Amethyst Room of Pima Community College Downtown Campus, 1255 N. Stone Ave. Lectures are scheduled on Mondays at 6:00 pm October through May.

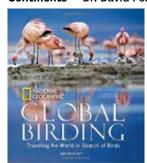
October 5

Calling All Cuckoos

The Living With Nature Monthly Program welcomes you to a new season of exciting speakers and talks! Our launch event will be a mix of social gathering, announcements about the upcoming Living With Nature Monthly Program series, and a presentation. Jennie McFarland, Tucson Audubon IBA Conservation Biologist, will give a short talk on the recent Yellow-billed Cuckoo surveys.

November 16

My Favorite Birding Areas On The Seven Continents — Dr. David Pearson



The book "Global Birding" was published by National Geographic Society to answer the question, "Where is your favorite birding spot in the world?" Pearson wrote the

personal experience vignettes for each site in the book. He will present his favorite places on each continent and explore the questions birders should ask if they are planning to bird exotic sites.

Save the dates for 2016:

January 11, February 8, March 14, April 11

GREEN VALLEY

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

November 7

Measuring the Impact of Artificial Light at Night on Bird Populations —Dr. Eric Craine The environmental impacts of artificial light at night are of increasing interest to scientists, environmentalists, and community planners. It is now understood that the very large scale, relatively recent conversion to brightly lit nights has measurable effects on both humans and wildlife. Birds are potentially sensitive barometers of the effects of light at night, and in this presentation we will look at their responses to artificial light, as well as new techniques for measuring light in the night time environment.

December 5

Bird Diversity in Western Mexico...from Mazatlan to Manzanillo — David MacKay

The tropics begin just south of Tucson in the state of Sonora, but by the time you reach Mazatlan, the diversity of the tropics is in full force. An extensive variety of habitats are found in this rather small geographic region, making it possible to see more than a third of the bird species that exist in the entire country! In this fascinating presentation, David will explore the abundant natural diversity and the warm culture of the country he calls home.

Save the dates for 2016:

January 10, February 6, March 5, April 2

NEW VENUE! Western National Park Association 10:00-11:00 am

12880 N Vistoso Village Dr, Oro Valley, 85755

November 14

Birds and Climate Change—Tice Supplee

Join Tice, the Audubon Arizona Director of Bird Conservation, for a presentation of Audubon's seven year scientific study behind how climate change is becoming the number one threat to North American birds. Learn where potential habitat "strongholds" for birds are located in our state and how you can join Audubon in local actions that can make a difference for the future of our birds and for us.

Save the dates: January 23 and March 19, 2016

TUCSON AUDUBON NEWS ROUNDUP

Turn Your Taxes into Treasure for the Trekking Rattlers

The Trekking Rattlers is a Tucson middle school hiking and birding club that would love to have your charitable tax credit dollars.

What the heck are charitable tax credit dollars?

If you owe Arizona state tax, you can designate \$200 (\$400 for couples filing jointly) to go directly to the charitable organization or school of your choice instead of to the State of Arizona, at no extra cost to you. It's about as close to free money as anyone will ever get—and in this case, your tax credit dollars can directly support the Trekking Rattlers of Billy Lane Lauffer Middle School.

What the heck is a Trekking Rattler?

Trekking Rattlers are middle school students from Billy Lane Lauffer Middle School in the Sunnyside School District who venture out into the wilds of Arizona in search of birds, bugs, trees, creeks, clouds, and a good time for all. The crew is headed up by Tucson Audubon volunteer Deb Vath. Any student can tag along, and the transportation is paid for by your tax credit dollars.

If it's that simple, why the heck didn't you say so?

Follow these 4 simple steps:

- 1. Send your charitable tax credit to the Trekking Rattlers. For a Sunny Side school district tax credit designation form, go to: susd12.org/ sites/default/files/taxcredit_form_2014.pdf
- 2. You must write in "Trekking Rattlers Hiking and Birding Club" next to the name of the school (Billy Lane Lauffer Middle School) directly on the paper.
- 3. Also send a quick note to Tucson Audubon (dvath@hotmail.com) to let us know that you have designated your funds.
- 4. You will receive an official tax credit voucher to submit with your taxes in place of this money.

Urban Tucson kids will get a chance to step outside and explore the natural wonders of Arizona, some for the very first time. You will have found a way to turn taxes into treasure!



Trekking Rattlers in the field, Deb Vath

In Memory of Marilyn M. Bicking

Vibrant volunteer and generous donor Marilyn Bicking passed away on June 28, 2015.

Marilyn will be remembered especially for her dedication to volunteering in our Nature Store. She came to Tucson Audubon in approximately 1999 and volunteered for 11 years. Each Tuesday, she would pick up our other long-time volunteer, Jeri Ogden, and together they would carpool to the shop. Marilyn brought her beautiful smile and spirited attitude to keep our store hopping and lively! She worked hard to help customers purchase new field guides and binoculars and guided visitors on where to see their target birds.



Before coming to Tucson Audubon, Marilyn and her husband, John, worked in Moab, Utah as raptor rehabilitators. Their dedication to birds and the bird conservation field is commendable.

On top of her love for birds, Marilyn was an avid New York Yankees fan and collector of authentic Native American pottery.

We cannot express enough how grateful we are for Marilyn's contributions to Tucson Audubon and the world of birds, including a generous contribution left to Tucson Audubon in her will. She will be missed!

You're Invited to the **Holiday Potluck!**

MONDAY, DECEMBER 7TH AT 6 PM

St. Philip's in the Hills Episcopal Church, Murphey Gallery East Room



Each year, the holiday potluck celebrates our members and all vou do for Tucson Audubon. It's a great time to meet fellow nature enthusiasts, catch up with old friends, and learn something new and exciting from our guest speaker. This year, Scott Richardson, supervisory biologist with the U.S. Fish and Wildlife Service, will be speaking on the Status of the Cactus Ferruginous Pygmy-Owl in Arizona and Northern Mexico.

Whether this is your first or fifteenth holiday potluck, we hope you will join the fun. Visit tucsonaudubon.org/calendar to RSVP online, or call 520-629-0510 x7002 so Diana can take your details. When you RSVP, please indicate whether you will be bringing a salad, appetizer, main dish (vegan, vegetarian, or meat), dessert, or punch. Please bring your own plates, cups, cutlery, and serving utensils. Simple "recipe cards" are also appreciated by those with dietary restrictions.

This is sure to be a wonderful event and we look forward to seeing you there!

Online Now: Tucson Birding Trail Map

NEWS FLASH! THE ONLINE VERSION OF THE TUCSON BIRDING TRAIL MAP IS LIVE: TUCSONAUDUBON.ORG/TUCSONBIRDTRAIL

Want to go birding but don't have time to drive to the Chiricahuas or the San Pedro River? New to birding and want to start local? In town for a couple days and need a quick birding fix? You'll find an abundance of places to go birding right around Tucson!

Free hard copies of the Tucson Birding Trail Map will be available in the Nature Shops soon, but the online version is ready right now. The map has 45 birding locations in and around the Tucson metro area.

For full functionality, click on the square brackets near the upper right corner of the map to change to "full screen" mode, where you will see a list of birding sites and their location on the map. Click on any site to see information about the birds and amenities at the site. Zoom in on the map to see how to get there. Please do not hesitate to contact Kendall Kroesen with suggestions for improving the online version of the map: kkroesen@tucsonaudubon.org or (520) 209–1806. Our thanks to Arizona Game and Fish Department Heritage Fund and Tucson Parks and Recreation Department for funding and collaborating on this project.





Volunteer Shindig! Is Back SAVE THE DATE!

The second annual Volunteer Shindig! is coming up on November 9th in the Historic Y Courtyard from 5–8 pm. Make sure you are on hand for this fun event—at which we expect nothing from our wonderful, devoted volunteers but to show up and be showered with appreciation, food, drinks, and prizes. See you there!

Do you love hiking and working with kids?

Trekking Rattlers is looking for *you* to help us co-lead educational hikes for middle school students in some wonderful places in southeast Arizona. See page 5 for more information, or contact Sharon Long at: slong@tucsonaudubon.org.

WELCOME NEW VOLUNTEERS

Vicky Elliott, John Koshak, Sandy Marin, Lisa Marshall, Linley Mescher, Karen Morey, Tammie Rohr, Vera Walters

THANK YOU TO OUR FREQUENT FLYERS

Nick Allison, Ardeth Barnhart, Myrna Beards, Melanie Builder, Shawn Burke, Karen Chandler, Andrea Cohen, Janet Cohn, Mich Coker, Christine Curtis, Sandy Elers, Peggy Ford, Marlesa Gray, John Kennedy, Robert King, Susan Kozacek, Suzanne Long, Marcia Obara, Erin Olmstead, Deb Vath, Frances Ann Walker, Nancy Young Wright, Claire Zucker

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

GIFTS IN HONOR/MEMORY

In honor of Abigail and Suzanne Long from Nick Allison In memory of Ed Caldwell from Mary Caldwell In memory of Richard Grand from Carroll Fergusson In honor of Nick Allison from Suzanne Long In honor of Barbara Shipman from Spencer Lunderman

WELCOME NEW MEMBERS

Tiffany Abeloe, Doris Abrams, John Bacher, Gini Baird, Beverly BeLury, Cynthia Bethard, Lou Ann Bieging, Janet Brown, Leslie Carpenter, Bryan Castner, Win Cebula, Pat & Norman Clark, Kathleen Debiak, Melissa & David DiPeso, Maria & Steve Duane, Eileen Dudley, Constance Elson, Barbara Ericks, Stephen Flowers, David Frechette, Dusty Friedman, Kathryn Gabriel, Elizabeth Garney, Bob Gary, Danielle Geller, Hannah Greene & Manojkumar Saranathan, Abby Greene, David Greene, Andrea Guice, Mark Hengesbaugh, Janelle Hink, Becky & Daryl Hiser, Dan Judkins, Cathy & Steve Kaye, Lisa & Andrew Marshall, Mark Mason, Anne & Rick Matsen, Martha Narro & Bill Montfort, Jamie Moore, Linda Needham, Philip Nice, Dianne Nilsin, Peggy & James Pierce, Sally Quinby, Mercy & John Rhodes, Jeff Ronstadt, Fred Ronstadt, Gary Russell, Patrick Santinello, Carolyn Shafer, Janilyn Shuman, Dana & Ronit Simon, Joyce & John Spears, Lorraine St. Germain, Mister Stone, JoAnn Strohn, Philip Tsibulsky, Margo Van Den Berg, Gail Van Wagoner, Michele & Stephen Vaughan, Linda Vautrin-Hale & Bruce Hale, Patty & Jim Walmann, Patricia & Richard West, Nick Whelan, Jo & Fred Wishnie, Sandra Wolf

FIFTH ANNUAL TUCSON BIRD & WILDLIFE FESTIVAL ROUNDUP

Thank you to all who attended and supported the fifth annual Tucson Bird & Wildlife Festival at the Riverpark Inn! It is because of you that this event continues to grow and thrive. A special shout out to our volunteers and staff, without whom this event would not be possible. It took over one hundred volunteers, including our remarkable and skilled field trip leaders, to make this festival such a success. Thank you!

Check out our Facebook page and website for more photos. We hope to see you at the festival next year, August 10-14, 2016.













VOLUNTEERS

Jacob Acosta Ross Adams Keith A. Ashley Matt Bailey Sharon Bale **Brittany Barker** Peter Bengtson **Betty Bengtson** Rosalie Bennett Chris Bittle Michelle Bourgeois Eileen Buckel Michael T. Byers Matt Clark **Dorothy Copps** Laura E. Cotter Ed Curley Laura Diaz Joseph J. Eigner

Sandy Elers Linda Elling Vicky Elliott Cynthia M. Elton Pamela J. Emerson Debra A. Finch Dorothy Fitch Karen M. Fogas Liz Harrison Tim Helentjaris Jonathan Horst Barbara M. Johnson **Bete Jones** Callie Jordan John W. Kennedy Lynda Klasky Karen Kluge Kendall Kroesen Rodd Lancaster Don Henry Larson

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COUNTING CUCKOOS IN THE HOW YELLOW-BILLED CUCKOOS USE SKY

Jennie MacFarland, Conservation Biologist

This summer has been a whirlwind of activity for Tucson Audubon as we searched for Yellow-billed Cuckoos in the Coronado National Forest and completed the most ambitious bird survey project in our history. Seven Tucson Audubon staff members and many dedicated volunteers surveyed eight separate sky islands, with five survey routes each, four times through July and August for a total of 160 surveys! This huge project required three surveys a week out of the Tucson Audubon office (Huachuca Mountains and Chiricahua Mountains were run remotely by awesome volunteer leaders and supporting volunteers) and a lot of pre-dawn meeting times for everyone who helped.

It was Tucson Audubon's dedicated and skilled volunteer force that made us uniquely qualified to carry out this urgent conservation project for the Coronado National Forest. The western population segment of the Yellow-billed Cuckoo was officially listed as Threatened under the Endangered Species Act in October of 2014 and its designated Critical Habitat is still being revised.

The range of the western Yellow-billed Cuckoo has been greatly reduced due to habitat loss: over the last century, the population has declined from 15,000 pairs in California to about 40 pairs currently. Arizona populations have declined up to 80% in the last 30 years, with an estimated current population of 250 pairs, the highest in the US. Arizona is an important stronghold in the US for the western Yellow-billed Cuckoo, so it was very meaningful for us to encounter as many Yellow-billed Cuckoos as we did in the previously unexpected high-elevation sky island habitats in southeast Arizona.

The sky island that I thought would give us the least amount of

trouble, the Santa Catalina Mountains, turned out to be a cipher that we just could not figure out. We looked everywhere: Sabino Canyon, Tanque Verde Canyon, Pima Canyon, and Ventana Canyon, while on Mount Lemmon we checked Molino Creek, Bear Canyon, the Butterfly Trail and Sycamore Reservoir with negative results. We even sent an intrepid team into remote Canyon del Oro on our all-terrain vehicle with no luck. When we finally looked on the north side in Peppersauce Campground, we found our first and only Yellow-billed Cuckoo pair. The lack of nesting Yellow-billed Cuckoos in the Santa Catalinas could give us some good insights into what conditions these birds need to nest in the sky islands.



Dan Lehman in the canoe at Pena Blanca Lake, Jennie MacFarland

The Santa Rita Mountains proved more forthcoming with cuckoos, and we found them in several areas including three territories in Montosa Canvon, Proctor Creek. two territories in Florida Canyon, and two territories in Box Canyon, at least one of which had a nesting pair that we watched carrying food into an unseen nest.

The Patagonia Mountains have once again proved to be amazing for birds. We found Yellow-billed Cuckoos in four out of the five drainages we searched, and two of those drainages had multiple territories. In the Patagonias, we began to realize that something amazing sometimes happened when we played the cuckoo call as





Western Yellow-billed Cuckoo, Rock Corral Canyon; Ben Smith



CORONADO ISLAND HABITATS IN SOUTHEAST ARIZONA

part of our survey protocol—an Elegant Trogon would appear! In one instance, a pair of Elegant Trogons came in to the call and the male actually swooped at the volunteer holding the speaker. We began to wonder: are Elegant Trogons and Yellow-billed Cuckoos direct competitors in these higher elevations?

The Chiricahua Mountains, which are so excellent for many species of bird, surprisingly did not turn up any Yellow-billed Cuckoos in the areas we chose to survey. There is at least one territory in the town of Portal, but the team that extensively surveyed five areas in the Chiricahuas within the National Forest could not turn up a single Yellow-billed Cuckoo. The team that searched the Huachucas had better (though still modest) success, detecting a cuckoo twice in Miller Canyon and once in Hunter Canyon. The other three canyons surveyed were devoid of cuckoos. It is very interesting to me that the three largest ranges—these two and the Catalinas—had the lowest success rate for finding Yellow-billed Cuckoos. Interestingly, the Whetstones, which are the driest of the sky islands we surveyed, did host at least two territories of Yellow-billed Cuckoos: one was found in French Joe Canyon and the other in Guindani Canyon, which is accessed from Kartchner Caverns State Park.

The Atascosa Highlands turned out to be the area with the most Yellow-billed Cuckoos and posed some of the biggest logistical challenges as well. Surveyors watched a cuckoo foraging in the ocotillos that line the canyon walls of Rock Corral Canyon's two territories. The famed Sycamore Canyon has two to three territories and provided more interesting Elegant Trogon encounters, such as an entire family—both parents and two full-sized fledglings—which flew in during a survey. At the entrance to Pena Blanca Canyon, we detected one cuckoo and refound the continuing Rufous-capped

Warblers. Pena Blanca Lake itself had at least two territories and was twice surveyed from a canoe to better access the more remote side of the lake. At Arivaca Lake, teams found at least four separate territories, but there are likely more in some of the lush canyons draining into the lake that we decided not to revisit after encountering drug smugglers (Happily, this unexpected encounter was without incident, but was a sobering reminder that we needed to be careful in these remote areas so close to the international border).

Of all the sky islands we surveyed, the area with the most interesting results was the Canelo Hills. This little-explored area is astonishingly beautiful and lush in the summer. Out of the five areas we searched. we did find cuckoos in four of them, with three of those supporting multiple territories. Many of the surveyors here also reported Elegant Trogons responding, sometimes stridently, to the Yellow-billed Cuckoo call. Interestingly, though Elegant Trogons had never been reported to eBird in the Canelo Hills, every team encountered them.

What is especially interesting is the absence of mesquite trees in areas where we found nesting Yellow-billed Cuckoos. This, more than anything else, tells me that these birds can and do utilize higher elevation sky island habitats. For a population that has undergone such a dramatic and alarming decline in range and population, finding a previously unknown habitat type that Yellow-billed Cuckoos use to raise their young in southeast Arizona gives me hope that it is not too late to protect some of their most important habitats for the future.

To all of the 46 volunteers that donated 950 hours and the 7 Tucson Audubon staff that together conducted 1,515 five minute call-back surveys: Thank you!





Matt Griffiths and Rodd Lancaster after escaping Canyon del Oro



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PATON CENTER FOR HUMMINGBIRDS

Vincent Pinto Leads the Way for Seven Saturdays in Patagonia

Keith Ashley, Coordinator: Paton Center for Hummingbirds

Patagonia resident Vincent Pinto of Ravens-Way Wild Journeys has graciously agreed to guide the Paton Center's 2015-16 Seven Saturdays in Patagonia bird and biodiversity hikes, and Tucson Audubon members are in for a treat! Vincent has blazed a unique career path combining formal academic work in wildlife biology and environmental studies with outside-the-box nature adventures and earth stewardship. He is a visionary, hands-on conservationist, a local bird expert, a passionate interpreter of the Patagonia wilds... and more.

Together with his wife Claudia, Vincent owns two southeast Arizona nature and wildlife sanctuaries: the 50+ acre Raven's Mountain in the Chiricahuas and the 42-acre Raven's Nest by Patagonia Lake. Based at Raven's Nest, Vincent fulfills his mission to educate and inspire people of all ages about the wonders of our natural world.

A barefoot boyhood exploring the Pennypack Woods near Philadelphia set Vincent on a path that has included scientific research on formerly dwindling populations of Gould's Wild Turkey. From his study site in the Peloncillo Mountains of the New Mexico-Arizona border, he developed an insatiable taste for the Sky Islands' biodiversity that has only grown stronger through the years.

In his 28 years of experience since first encountering southeast Arizona, Vincent has learned to combine his love for the Sky Islands with a passion to protect the region. He approaches this challenge through every possible avenue. He teaches and lectures across Arizona in ethnobotany, natural history, wilderness survival skills, and astronomy. He actively practices

ecosystem management on his own land and connects others with the beauty and excitement of nature through the unique programming of his Ravens-Way Wild Journeys.

"The future of conservation in the Sky Islands region is inextricably linked in large part to birds," Vincent explains. "More than with any other faunal group, people have proven time and again that they are willing to travel long or short distances and collectively spend millions of dollars to observe and enjoy birds." He further notes, "Protecting bird habitat obviously also safeguards the same wild-lands for all of the other species inhabiting them, thus bolstering regional efforts at keeping entire ecosystems functioning properly. Dedicating time, money, land, and expertise to conserving birds is a true long-term investment in both our ecology and economy."

Vincent reasons that the short-term gains of misusing resources fly directly in the face of eco-tourism as a sustainable economic venture. He asks: "When is the last time you spent good money to see an open pit mine, a maze of unnecessary dirt roads, or a dry, depleted river system as part of your hard-earned and much anticipated vacation?" Vincent has a vision of our Sky Islands region becoming a World Biosphere Preserve. "This would send notice to Arizonans, Americans, and foreign visitors alike that we value all of nature and are not willing to destroy it to line a few pockets. As part of this effort, we need to better communicate to would-be birders that visiting our Sky Islands is a unique, affordable, exciting, and commendable thing to do."





SEVEN SATURDAYS IN PATAGONIA

For seven Saturdays, October through May, Vincent will be sharing his gifts with Tucson Audubon members on a free monthly hike that leaves from the Paton Center in Patagonia. Hikes will be followed by a relaxed lecture offered by one of southeast Arizona's experts on a topic related to birds, birding, conservation, science, or natural history. You can learn more about Vincent and Ravens-Way Wild Journeys at ravensnatureschool.org and more about the Seven Saturdays in Patagonia 2015-16 season at tucsonaudubon.org/paton.



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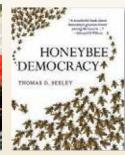


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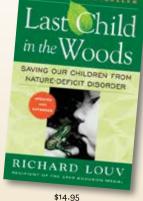






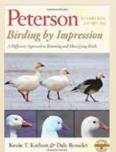
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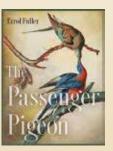
















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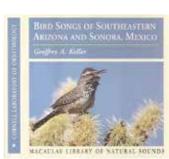
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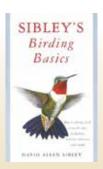
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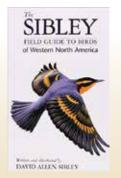


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Birding Rocky Point, Arizona's Beach Bob Bowers







Blue-footed Booby; Yellow-footed Gulls are found only in the Sea of Cortez; Arizona monsoon enhances Rocky Point sunset; all images by Bob and Prudy Bowers

Arizona, a landlocked state famous for its deserts, saguaros, and grand canyons, seems an unlikely place for ocean birding. But Google 'Arizona's Beach' and prepare to think differently: search engines recognize a beautiful stretch of ocean frontage around Puerto Penasco, Mexico, as "Arizona's Beach," and for good reason.

Just sixty miles south of Arizona's Organ Pipe National Monument, Puerto Penasco, or Rocky Point, lies along the upper reaches of the Sea of Cortez on a highway built to connect Baja California with mainland Mexico's state of Sonora. Once a sleepy fishing village, Rocky Point has evolved into a serious tourist destination with high-rise condos, gourmet restaurants, dive shops, and golf resorts. Almost equidistant from Phoenix and Tucson, Rocky Point easily qualifies as 'Arizona's beach.' From Tucson's I-19 intersection, it's just 206 miles and less than 5 hours to Rocky Point's Sam's Club, and while you do need Mexican car insurance, no tourist visas or automobile permit are required.

Even though birding goes unmentioned in most lists of Rocky Point attractions, the area's open ocean, coves, bays, estuaries, and wetlands are home to a large variety of resident and migratory birds. Eleven area hotspots are listed in eBird, with a total of 258 species, many of which are unknown or rarely seen in Arizona. This includes one Sea of Cortez endemic, the Yellow-footed Gull, American Oystercatcher, Surfbird, no fewer than eight terns, Sanderling, Red Tropicbird, five plovers, two storm-petrels, Black-vented Shearwater, and both Brown and Blue-footed Boobies, among many others. We toured these hotspots in mid-July, and although birding is far better from fall to spring, we found 57 species in two days of casual birding.

Of the 11 hotspots, some are easier to access and some are more productive than others. Article limits prevent describing them in detail here, but email me for complete descriptions, directions and map information. The largest list of species (240) shows for Puerto Penasco Ciudad (city), although this was probably the initial hotspot and likely included other sites that are now defined separately. Two of the other sites, Cholla Bay and Playa Pelicano, are west and north of the city, while six of the hotspots are part of the city: Playa Bonita (between Sandy Beach and the port), the port itself, the malecon, the settlement ponds, Las Conchas, and the Center for Desert and Ocean Studies (CEDO). Morua and La Pinta are estuaries east of the city.

The town, port and malecon are reached by continuing on Highway 8 from Arizona, which becomes Avenue Benito Juarez and ends at the waterfront. The Cholla Bay site is a protected estuary just north of the bay community west of town, while Playa Pelicano has been absorbed by the Laguna del Mar resort, which lies north of town and west of highway 3. The resort is under development, but at least for now is accessible to birders, and birding both here and at Cholla Bay is excellent.

Another great site is the 'Estanque de Aguas,' or sewage settlement ponds, which can be reached by taking Calle Sonora east of Benito Juarez until it ends in a residential area, parking there, and walking the treed levees that separate the large ponds. The two estuaries east of town are not easily accessed, though you can reach Morua via Playa Encanto and La Pinta from the dirt road entry to the Mayan Palace resort. Tell the Mayan Palace gate keeper you want to go to the resort's restaurant

and park your car at a bridge over the estuary in order to walk and bird at least part of the large wetlands.

Las Conchas is a gated oceanfront residential area that is almost impossible to bird unless you are staying there, and there are many short-term rental homes available, which is the option we chose in July. But CEDO is also accessible through the Las Conchas gate, so you can tell the gatekeeper you are visiting CEDO, park at the center and walk down to the beach that runs adjacent to Las Conchas. One morning, sitting on our ocean-view deck and enjoying a cup of coffee, we realized we were seeing flocks of Blue-footed Boobies flying east to west, in what seemed like never-ending groups. We started counting, and the flocks, which ranged from a dozen birds to fifty, streamed by for two hours, at about 50 birds per minute. In other words, we sipped our coffee and watched 6,000 Blue-footed Boobies fly by our house. And this was during the slow-birding summer. I can't wait to go back this winter.

Bob writes nature and travel articles. He writes a birding column for an Arizona newspaper, and he and his wife, Prudy, travel and bird extensively throughout Mexico. His email is bobandpru@aol.com



JUST ADD WATER— AN UPDATE ON THE **COACHLINE GRAVEL PIT**

Text and images by Andrew Core

Birders in the desert know that water attracts all sorts of birds, and a certain spot in Marana this last year was a case study for the difference that water can make.

At the north end of Continental Ranch, the Tucson Mountains extend a narrow finger of ridgeline that ends rather suddenly with a 500-foot drop down to the Santa Cruz River.

Between the east side of the ridge and the Santa Cruz River is an old borrow pit, created by ADOT in the 1960s to aid in the construction of I-10.



The pit has been known by many names over the years, but most birders just call it the Coachline Gravel Pit for its location off Coachline Blvd. After it fell into disuse in the 1960s, an old berm surrounding the pit would occasionally retain water from summer monsoons and runoff from the adjacent neighborhood. The site is directly adjacent to the Santa Cruz River, where cottonwoods and

willows line its banks. It is one of the few places in Tucson where the mountains come right down to the river and thus offers an interesting mix of species for birders to observe. The Town of Marana acquired the property in 2003 for "recreational and possible future environmental mitigation purposes."

In July of 2006, the floodwaters associated with Tropical Storm Emilia completely overtopped the thin berm between the pit and the river, filling the pit with water. My first visit in October was unremarkable, but a few weeks later my friend Jake found a Tricolored Heron there and I began to dream about the possibilities. I began to stop by every few weeks as the water evaporated; there were plenty of places to explore. After the floodwaters eventually dried up the next spring, I stopped visiting as frequently, but the area never quite left my mind.

There were few changes from year to year, but none of them seemed to impact the birds much. The monsoon in 2007 brought in some runoff from the surrounding neighborhoods, but the Santa Cruz stayed in its channel and the water evaporated before long. In 2011, Marana implemented a management plan and designated the El Rio Open Space Area. I also noticed that the river was eroding the berm in the northeast corner, and in 2012 it finally broke through completely, but at the time this didn't seem to make much difference other than making the pit more difficult to walk



around. A few interesting birds were found each year by a handful of birders-Northern Parula, Eastern Phoebe, Dickcissel, Hepatic Tanager, Rose-breasted Grosbeak—but there wasn't much to distinguish this spot from a dozen others along the Santa Cruz. And it probably would have stayed that way if not for another flood.

The remnants of Hurricane Norbert in September 2014 brought an abundance of rainfall to Arizona. Similar in scale to the floods of 2006, there was one key difference that had a big impact on the pit: the small break in the berm that had developed in 2012 was blown wide open, allowing the river to shift its course. An enormous amount of water flowed into the pit, which was about 20 feet deep at the peak of the floods. After the flood subsided, a curious thing happened: instead of the water slowly dwindling away over a period of months, one channel of the river continued to flow through the pit with a circulating supply of water, preventing stagnation and making the site attractive to many more birds.

That water brought an impressive abundance of birds to the area. In November, several rare waterfowl were found—Red-breasted Merganser and Snow, Greater White-fronted, and Canada geese—and suddenly it was on birders' radar. Beginning in January, the Arizona Daily Star published three articles while two TV stations did stories on the area. There were days that dozens of birders would line up with scopes and cameras to look at the numbers and variety of birds-22 species of





Coachline full of wate

ducks and geese, plus dozens of grebes, cormorants, herons, shorebirds, gulls, and scores of swallows. More than 100 swallows of four species (50+ Rough-winged, 50+Tree, 2 Barn, 8+ Bank) stayed through the winterperhaps the first December record of Bank Swallows for the region. It would take too long to list all the interesting birds, but most notably a flock 20 Canada Geese was present most of January, along with two different Heermann's Gulls and two different Clay-colored Sparrows. At the end of May, a Least Tern showed up for a day, an American White Pelican stayed for a week, and a California Gull showed up and stayed for three months.



The reaction from nearby residents was mixed. Many people enjoyed the sudden appearance of a lake behind their back fences (one resident even bought a spotting scope, and I gave away several bird books). Others resented visitors parking in their neighborhood or cutting through their yards, not to mention complaints about the bugs or (especially) all the trash that had

washed out of the Santa Cruz riverbed. There were reports of target shooting or hunting, and disc golfers were upset that their course was underwater.

The Town of Marana responded to the surge in interest and activity by making the area a preserve (eliminating hunting) and studying alternative uses for the area. All of the options require the trash and debris to be removed, though, so the town repaired the breach in April and the pit is now mostly dry except for a shallow pool in the southeast corner. It remains a good place close to town to explore and get off the beaten track, but the excitementcorrelated with the water levels—has mostly faded. Work also recently began on a trailhead on Coachline for the Santa Cruz River multiuse path, which will extend along the south and west edges of the pit and connect to Avra Valley Rd.; construction is slated for spring 2016.

Marana has certainly noticed the recent abundance, and the town seems interested in developing a wetlands or lake here. To express your views, contact town manager Gilbert Davidson at 520-382-1908 or townmanager@ maranaAZ.gov. MaranaAZ.gov.

Andrew Core works with Athletes in Action and lives in northwest Tucson. He coordinates the weekly southeast Arizona Rare Bird Alert, goes birding often, and mostly enjoys just being a husband and dad



Least Tern

COACHLINE PART OF IMPORTANT WILDLIFE CORRIDOR

The location of the Coachline Gravel Pit is important for wildlife because, as a wildlife corridor, it connects the uplands of the Tucson Mountains with the Santa Cruz River. However, this area is also part of a potential eastwest wildlife corridor linking the Tucson Mountains to the Tortolita Mountains. At Interstate 10, the link is made possible by an old, disused railroad underpass just east of the pit. Wildlife can move relatively undisturbed under the highway here and tracking studies by Sky Island Alliance have confirmed that animals do pass through. That is, if development can be managed to keep the corridor open.



Herons and egrets find ample wading habitat at Coachline

BACK FROM THE BRINK: THE FUTURE OF THE CA

Cathy Rosenberg

The landscape is stark, barren, yet majestically adorned with windswept bluffs shaped into vertical cliffs, deep canyons, narrow buttes, and long, open plateaus. California Condors perch high overhead on the ridges of Vermilion Cliffs National Monument on the Colorado Plateau in northern Arizona. The condor is one of the rarest land birds in North America and also the largest, with a wingspan of up to ten feet. From the ground, the condors look like small, dark specks perching on the cliff walls.

Ten thousand years ago, at the end of the Pleistocene Epoch, fossil records reveal that the California Condor occupied most of North America. By the late 1980s the majestic bird was losing its hold on an epic survival. The last wild birds either died or were brought into captivity, and the condor became extinct in the wild. Today, thanks to a comprehensive recovery program with captive birds, the condor has returned to the mountainous regions in Southern California north of Los Angeles, the central California coastline, Baja California, and remote areas of Arizona from the Grand Canyon into southern Utah.

Despite the comeback, the condor still faces significant challenges. The free-flying population requires aggressive micro-management to monitor and address the birds' continued exposure to lead poisoning and other threats—some known, some developing, and perhaps others yet to be determined. Predators such as golden eagles and coyotes kill unsuspecting condors in the wild. The growing number of wind turbines creates concerns of collision, and the emergence of new strains of avian viruses pose additional risks. The condor program is also expensive, and the cost continues to grow as the number of birds increases.

The recovery effort has come to a turning point. The tremendous price tag and operational demands necessary to manage a growing population of wild condors could jeopardize the restoration of a self-sustaining wild population. If the condor population of adults, sub-adults, and nestlings is not continuously monitored and treated for exposure to lead (the main obstacle to recovery), the magnificent birds could again become extinct in the wild.



Adult Condor, George Andrejko

THE COMEBACK

A wild-hatched, free-flying California Condor was last sighted in Arizona south of the Grand Canyon in 1924. The birds took to the skies in Arizona again in 1996 after The Peregrine Fund, in cooperation with the U.S. Fish and Wildlife Service and Arizona Game and Fish Department, released six captive-raised condors from Vermilion Cliffs. These condors were raised in the captive-breeding program at The Peregrine Fund's World Center for Birds of Prey in Boise, Idaho. The wild birds have naturally extended their range from northern Arizona into southern Utah, about 70 miles away from the original release site.

Today 71 birds, including 12 breeding pairs, live near the Grand Canyon in Arizona and Utah. One hundred sixteen condors are free-flying in California, and 29 are wild in Baja California, Mexico. Two hundred and six condors are held in captivity.

The goal of the California Condor Recovery Plan is to establish two self-sustaining populations—one in California and the other in Arizona—with 150 birds in each population, including 15 breeding pairs. The captive program would continue to produce young birds that maintain the genetic diversity of the two wild populations.

THE PRIMARY FACTOR

As scavengers, condors consume the carcasses of mammals that die naturally but also the remains of animals often shot with lead-based ammunition by hunters, ranchers, and law enforcement when wildlife is mortally wounded on roadways. When a lead bullet strikes an animal, it breaks apart and distributes hundreds of fragments. Condors ingest parts of the spent lead ammunition when they feed on sport or varmint kills.

Lead poisoning causes 51 percent of diagnosed condor mortality, said Chris Parish, the field project supervisor of the condor reintroduction project for The Peregrine Fund. An average of 17 birds in the Arizona/ Utah population are treated each year for lead poisoning. As of January 1, 2015, thirty California Condors are known to have died from lead poisoning in Arizona since the restoration program began in 1996.

Condors are highly susceptible to lead poisoning because they are obligate scavengers feeding solely on the remains of animals found in the field. Yet they can withstand high levels of lead in their bloodstream without showing any signs, Parish said. That is one of the reasons the condors require close management of blood-lead levels. "Condors are bomb-proof outside of lead poisoning," Parish said.

GETTING THE LEAD OUT

Lead-based ammunition is still legal in Arizona, but in 2005 the Arizona Game and Fish Department began a campaign to educate hunters about lead poisoning in condors. To reduce the use of lead-based ammunition, the Arizona Game and Fish Department offers coupons to hunters for free copper bullets. Since 2007, more than 80 percent of Arizona hunters

LIFORNIA CONDOR



have cooperated with the copper bullet initiative, and the Arizona Game and Fish Department recently reported that 91 percent of big game hunters in Arizona cooperated with the lead-free efforts in 2014 when hunting in regions where condors search for food.

The condors are responding well in every other way, said Marti Jenkins, the California Condor propagation specialist at The Peregrine Fund World Center for Birds of Prey. The birds find their own food and have expanded their territories. They have bred, reproduced, and fledged young that have gone on to breed and produce their own young. But the survival of the condor remains constrained by lead poisoning. If management of the wild condors stopped tomorrow, the birds would again disappear in the wild, Jenkins said.



Condor taking flight at Vermilion Cliffs, Cathy Rosenberg

DOLLAR DILEMMA

As the number of birds continues to grow in the wild, the demand on management funds also grows. Wildlife managers release new individuals into the population, track the location of each condor, provide supplemental food to draw them into trapping areas, monitor reproductive efforts, and capture the birds to test and treat them for lead poisoning, said the spokesperson for the Arizona Ecological Services Office. The field teams also attach and replace identification tags, check transmitters, and vaccinate the condors for West Nile Virus before releasing them.

A five-year review completed by the U.S. Fish and Wildlife Service in 2013 indicates that future funding for the condor recovery program isn't yet clearly defined. According to the report, "the cost of field management has grown significantly, and the various organizations engaged in condor recovery have not identified sufficient ongoing resources to continue to expand, or even maintain, what they have in field management capacity."

OUTSIDE THE BOX

Saving the California Condor from the brink of extinction sets a precedent for the future of species in North America and the rest of the world. As the condors approach a full recovery based on the guidelines set by the Endangered Species Act, the next step is maintaining a self-sustaining population. This brings us to a crossroads in conservation.

The price tag for the condors' recovery is high (about \$5 million each year, funded primarily from private donations.). The cost will rise as the number of birds grows. Continuing to support a wild species that is vulnerable to a number of environmental threats may not be a sustainable course of action. If the condor recovery program ended today, the birds would likely fall victim to high blood-lead levels and again become extinct in the wild. For the condor, removing its exposure to lead seems like a simple solution, but trying to engage the public and protect the birds has been a costly and complicated endeavor. The alternative would be to make hard choices that allow the condor to survive on its own.

The long and sustained outcry to save the California Condor challenges the human condition, questions the motifs engrained in society, and may lead the way toward a healthier and cleaner environment.

Read the full story at tucsonaudubon.org/condor

Cathy Rosenberg writes about science and the environment and recently finished a master's degree in Journalism at the University of Arizona. She lives in Tucson and is an avid birdwatcher.



Adult Flying, Arizona Game and Fish Department; George Andreiko

HOW OUR REGIONAL SPECIALTY BIRDS FIT INTO THE WORLD OF BIRDING

Red-bellied Trogons and Yellow-bellied Whitestarts

Scott Olmstead

In this column we look at some of the specialty bird species of our southeast Arizona borderlands. We are proud of the birds that make our region unique! Birders from all over the US travel to southeast Arizona to add birds to their life lists. But outside of the context of southeast Arizona, are these birds really a big deal? Here we take a broader look at some of our iconic species, then poll a panel of international birding tour leaders to find out if these birds are really essential "ticks" from a world birding perspective. Remember, there are over 10,000 species of birds in the world! In each column, we'll look at one regular and one rarity.

Elegant Trogon (Trogon elegans)

Elegant Trogon is a southeast Arizona resident that breeds in sycamore-lined canyons throughout four of our Sky Island mountain ranges, wintering in smaller numbers. The trogons (Trogonidae) are a tropical family, with around 40 species found across four continents, the majority of which are found in the New World, and about half being classified in the genus *Trogon*. Trogons are largely non-migratory, and all species in the family share some similar behaviors, such as a diet consisting of fruits and large arthropods and a habit of nesting in cavities.



So what sets the Elegant Trogon apart from the rest of its family? For one, the **Elegant Trogon has** the northernmost range of the entire family and is the only trogon regularly found in the US. (The Eared Quetzal, another trogon family member, occasionally makes an appearance as well.) Whereas you might find as many as five trogon species coexisting in some lowland rainforest sites in

South America, in Arizona and much of Northwest Mexico, the Elegant Trogon is the only representative of its kind. The northern population, found in Mexico and Arizona, has been called the Coppery-tailed Trogon to distinguish it from the southern population found from Guatemala to Costa Rica.

Slate-throated Redstart (Myioborus miniatus)

This little sprite is a true Arizona rarity, having only been recorded about 15 times. The Slate-throated Redstart belongs to the New World Warbler family Parulidae. The Parulidae are a well-developed family of hyperactive insectivores, with over 100 species found in a variety of habitats throughout North, Central, and most of South America. Most of the warblers found in the US and Canada are migratory, heading south to warmer climates for the winter after breeding, while the tropical species generally do not migrate.

Slate-throated Redstart is part of the genus *Myioborus*, a group of flashy tropical warblers that nest on the ground and spend a lot of time flaring their conspicuous white tail feathers as they flit through forest habitats. This behavior must have reminded early naturalists of the American Redstart (*Setophaga ruticilla*) from eastern North America: the term "start" refers to the tail, and while the American Redstart does indeed have red in its tail, the Myioborus group of "redstarts" all show white. Many ornithologists refer to these warblers as "whitestarts," so if you hear birders talking about "Slate-throated Whitestart," now you will know where that comes from! The Slate-throated Redstart is found from the border states of the US all the way to Bolivia. It sports a red belly and breast in the northern portion of its range, but in Central America the underparts are orange, and South American populations are yellow underneath!



Slate-throated Redstart, Ecuad Pablo Cervantes/Tropical Birdin

Our tour leader panel this time is made up of Gavin Bieber of Wings Birding Tours, Rick Taylor of Borderland Tours, and Brian Gibbons of Victor Emanuel Nature Tours. According to the experts, by a 2–1 vote in each case, neither of these species is considered a "big deal" world bird. Although charismatic, their fairly large ranges make them "gettable" in many destinations.

Scott Olmstead is a high school teacher here in Tucson, as well as a part-time tour leader for Tropical Birding Tours (tropicalbirding.com).

CONSERVATION AND EDUCATION NEWS

Matt Clark and Chris McVie

Your Comments Needed on Tucson Parks Master Plan



The Tucson Parks and Recreation Department is working on a five-year master plan that will guide park management. The department seeks public input, so please weigh in! There is one more public meeting in October:

Wednesday October 7, 2015 Sahuaro High School 545 N. Camino Seco

Here are some points to bring up at meetings:

- Wildlife watching has a total economic impact of \$300 million in Pima County—birders are big contributors to our sustainable economic engine.
- As Tucson has developed, many recreation facilities have been built for swimmers, soccer players, and other user groups. The Master Plan provides an opportunity to incorporate environmentally responsible access, facilities and interpretation targeted to accommodate wildlife watchers and naturalists.
- Development, urban sprawl, and groundwater pumping have eliminated many local wildlife habitats, making a healthy system of parks and natural areas even more important for birds and other wildlife.
- Parks and Recreation should preserve natural open space (wildlife habitat) in parks for wildlife and wildlife watchers.
- · Ponds should be managed and enhanced for their value to wildlife.
- Where possible, turf should be reduced to save water and mowing.
- · Native trees, shrubs, and grasses should be planted for birds and pollinators.
- · Parks and Recreation should use Integrated Pest Management to avoid pesticides, especially toxic neonicotinoids.

Monitor tucsonaz.gov/parks/masterplan for future meeting dates and other ways you can give input. For more about the master planning process and to comment directly, write to: parksmasterplan@tucsonaz.gov.

Legal Victory for the Patagonia Mountains **Important Bird Area**

A year ago, we reported that the Sierra Vista Ranger District of the U.S. Forest Service had issued a "categorical exclusion" (CE) to foreign-owned Regal Resources for its proposed "Sunnyside" exploratory mineral drilling project in Humboldt Canyon of the Patagonia Mountains. A CE is

essentially a policy short-cut that allows mineral, energy, or geophysical investigations on public lands that meet certain criteria to avoid undergoing a detailed environmental analysis and public process. Tucson Audubon and partner organizations questioned if Sunnyside met these strict criteria. Humboldt Canyon is home to birds of conservation concern such as the Dusky-capped Flycatcher, Elegant Trogon, Broad-billed Hummingbird, Zone-tailed Hawk, and the threatened Yellow-billed Cuckoo and Mexican Spotted Owl, as well as ocelots and jaguars. The project would drill six exploratory holes up to 6,500 feet deep, one of which was proposed 0.1 miles from a Mexican Spotted Owl nesting core area. Loud mineral drilling and construction noise would occur 24 hours a day for months at a time over a period of three years.

The Patagonia Area Resource Alliance and Defenders of Wildlife joined together in a lawsuit against the Forest Service to challenge the CE decision. A September 15th legal opinion by Honorable Rosemary Marquez ruled against the Forest Service, confirming the project cannot move forward without the proper review of its cumulative environmental impacts.

Wendy Russell, Coordinator for the Patagonia Area Resource Alliance, was vindicated: "We're not going to stand by and let the Forest Service rubber-stamp these mining projects in the Patagonia Mountains. There's too much at stake for both our community and wildlife. This is the second time we've had to take them to court, and the second time we've won."

The Patagonia Mountains are a true biological gem, widely known for their outstanding birding and impressive biodiversity, but numerous mining proposals threaten the integrity of their wildlife habitat and water quality. The Patagonia Mountains are a designated Important Bird Area and Tucson Audubon's Paton Center for Hummingbirds is located astride Sonoita Creek in the town of Patagonia, which is fed by the watershed of this special sky island.

Tucson Audubon strongly supports reforming the antiquated 1872 Mining Act and is an active member of the Arizona Mining Reform Coalition. In the wake of the tragic mining waste spill into the Animas River in southern Colorado, as well as a similar but smaller-scale incident that occurred in the Patagonia Mountains last year, we have joined with dozens of other conservation and community organizations and tribes to call on Congress to pass comprehensive mining reform legislation.



Polluted Animas River in Colorado, Mor

Southline Steps Up with Arizona Game and **Fish on Mitigation Agreement**

The Southline Transmission Project is 360 miles long and divided into two distinct segments. The "new build" segment would construct 240 miles of new 345 kV double-circuit electric transmission lines from Las Cruces, New Mexico to south of Willcox, Arizona, following existing linear infrastructure to minimize impacts. The "upgrade section" would consist of double-circuit 230-kV lines to upgrade existing transmission lines from the Apache Substation south of Willcox to the Saguaro Substation northwest of Tucson, providing over a dozen opportunities to benefit local renewable energy.

In late August, we learned that Southline and the Arizona Game and Fish Department Commission had jointly developed a memorandum of agreement to mitigate impacts in the ecologically sensitive, Commission-owned Willcox Playa Wildlife Area, part of a designated Global Important Bird Area. The agreement includes commitments to relocate and reconstruct Crane Lake and move the Sandhill Crane roosting site further away from the lines so that cranes do not have to cross them when flying between the lake and the agricultural fields where they feed. The agreement also includes creating a 3-acre pond for native fish, new wildlife viewing platforms, and an informational kiosk.



Tucson Audubon and Audubon Arizona encouraged the Commission and Southline to include language in the agreement to address bird strike hazard mitigation measures and monitoring commitments, which was adopted by the Commission. Tucson Audubon looks forward to continuing to work with project proponents to further develop this agreement as a potential model for responsibly mitigating the effects of power lines in sensitive bird habitat.

Wildlife Garden Plant Profile

Lynn Hassler, Garden Volunteer Captain

MEXICAN HONEYSUCKLE, FIRECRACKER BUSH

Scientific name: Justicia spicigera Family: Acanthaceae (Acanthus)

Native range: Forested areas in eastern Mexico and Central America, 0-3,000 feet.

Wildlife value: Orange flowers attract pollinators including hummingbirds, butterflies, and Verdins; larval food plant for Texan Crescent butterfly.

Mexican honeysuckle is what we call a switch hitter: it can grow in full sun or in part shade. Flower timing depends on location and winter temperatures. If placed in summer shade and winter sun, it blooms more in the winter; when given full sun, it flowers more in spring, summer, and fall. One of the advantages of this plant is that blossoms can appear at almost any time of year, making it particularly appealing to humans as well as pollinators.



Plants are frost sensitive (stems damaged at mid- to high 20s; freezes to the ground in the low 20s), so it's a good idea to place them in a sheltered location. Try under the shade of a mesquite or palo verde, or adjacent to a warm patio or wall. Other than frost sensitivity, Mexican honeysuckle is relatively carefree and low maintenance. Pinch stem tips to encourage bushiness. If plants become leggy, trim back to rejuvenate. If frozen, shear in spring; they recover quickly. Low to moderate water users, these plants look better when given water every week or two during the warm season.



The genus Justicia is after James Justice, a Scottish botanist (1698–1763). The species name spicigera means spike-bearing, a reference to the clusters of narrow, tubular, bright orange flowers which are ideally designed for hummingbirds. Verdins and House Finches are fond of the blossoms as well, piercing the bases to reach the rich nectar.

Mexican honeysuckle is a larval food plant for one of the Brushfoot butterflies, the Texan Crescent. Despite their name, these bugs are not restricted to Texas: females proliferate like crazy and population numbers can suddenly explode, inundating urban gardens, foothills, and mountains.

This dependable, rounded, upright shrub grows 2-4 feet high and 3-5 feet wide. With its large, velvety bright green leaves and extended flower display, the Mexican honeysuckle lends a lush tropical feel to the landscape.

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

Speak Up Against SunZia

The SunZia Southwest Transmission project proposes two new parallel 500 kV transmission lines across 515 miles from Lincoln County, New Mexico to Pinal County, Arizona. In Arizona, SunZia would cross the San Pedro River near Benson and then head north, opening up an entirely new 30-mile-long infrastructure corridor on the west side of the river valley which would adversely impact mitigation lands protected by Pima County as part of the Sonoran Desert Conservation Plan.



SunZia has recently applied for a Certificate of Environmental Compatibility from the Arizona Power Plant and Line Siting Committee, required for any new transmission line or power plant to be constructed in Arizona. When new transmission lines such as SunZia are proposed, they must serve a true need, be appropriately located to prevent unnecessary and undue degradation, and avoid or minimize harm to wildlife, wildlife habitat, wilderness

values, and other important natural and cultural resources. Tucson Audubon's research clearly shows there is not a demonstrated need for SunZia and that it will have unacceptable impacts to sensitive resources. SunZia will only provide a few opportunities for local connections compared to the Southline Transmission Project, which seems an environmentally responsible and economically beneficial alternative.

Take Action!

- Attend and speak at a public hearing (and bring family, friends and colleagues):
 - Willcox Oct. 19-21 at the Willcox Community Center
 - Tucson Oct. 22-23 and November 2-3 at the Tucson Convention Center
 - Casa Grande Nov. 4-5 at the Holiday Inn Casa Grande
 - Florence Nov. 16-20 (as needed) at the Holiday Inn Florence
- Submit written comments through eservice.azcc.gov/Utilities/PublicComment. Type "SunZia" in the filter window and select SunZia Transmission, LLC. Be sure to add the docket number in your comment: L-00000YY-15-0318-00171. For background information and talking points, see Tucson Audubon et al.'s letters on the Draft Environmental Impact Statement for SunZia: tucsonaudubon.org/sunzia.

Tuscany in the Desert? Villages at Vigneto Update and Call to Action

The Villages at Vigneto (Vigneto) is a large, Tuscany-inspired development proposed by El Dorado Benson, LLC (El Dorado) on 12,324 acres of private land located near Benson, AZ. Vigneto proposes 27,760 new homes, commercial developments, golf courses, parks, vineyards, lakes, orchards, resorts, and an extensive road and utility network, all intended to attract up to 70,000 new residents. Tucson Audubon is working to constructively influence the project's environmental review, design, and intensity of use to improve water and wildlife habitat conservation outcomes.

Vigneto's large size and sensitive location near the San Pedro River and the Whetstone Mountains causes serious concern. The project has the potential to negatively impact a bird migration corridor of hemispheric importance, numerous sensitive species, vital conservation mitigation lands, the wet cave system of Kartchner Caverns State Park, and the sustainability of current and future human communities in the San Pedro River Valley. Water from this fragile desert river—already tenuous due to groundwater pumping, long-term drought, and climate change—supports the San Pedro River Global Important Bird Area and the first-ever designated Riparian National Conservation Area.

Tucson Audubon submitted a detailed, 43-page letter requesting that the Army Corps of Engineers re-evaluate Vigneto's outdated Clean Water Act 404 permit, in part because the development is

ARIZONA CBC SCHEDULE 2015-2016

The National Audubon Society has conducted Christmas bird counts (CBCs) since 1900. Volunteers from across North America and beyond take to the field during one calendar day in December and January to record every bird species and individual bird encountered within a designated 15-mile diameter circle. These records now comprise an extensive ornithological database that enables monitoring of winter bird populations and the overall health of the environment. Help is needed on most of these counts, so find one that interests you and contact the compiler for more information. See tucsonaudubon.org/cbc for the full list of Arizona counts.

TUCSON VALLEY CHRISTMAS BIRD COUNT

The Tucson Valley Christmas Bird Count, the largest one-day annual birding event in Arizona, is officially scheduled for Monday, December 14. Open to any and all birders of every level of experience, the CBC is a great way to get a snapshot of early winter bird numbers. We'll have over a hundred birders scouring the boundaries of our circle centered near River and Oracle Roads. Each person will be designated to a team assigned to cover one of 27 areas. At the end of the day, we'll meet up for a potluck and the second-best part of the event — the species countdown. Last year's record-breaking species total was exciting, but could we top 166 species this year? It's possible, but only if multiple unexpected rarities are found, and only if we get lots and lots of observers peering in every bush, wash, and park. Will we see a continued mind-boggling increase in Vermilion Flycatcher numbers? Are Cactus Wrens staging a comeback or are they still in decline? Every pair of eyes and ears are valuable assets to the mass effort! Sign up with Rich Hoyer at birdernaturalist@me.com.



Broad-billed Hummingbird, Dan Weisz

Last year the Tucson Valley CBC set a new all-time high for Broad-billed Hummingbird with 59. Just 15 years ago, this bird was still something of a rarity in the circle.

50% larger than the Corps originally permitted for Vigneto's previous incarnation. We asked our greater community to write and request the Corps re-evaluate Vigneto's outdated 2006 Clean Water Act 404 permit. Thank you for over 1,600 letters to date!

Tucson Audubon's summer survey for Western Yellow-billed Cuckoos in the Coronado National Forest detected cuckoo territories in two drainages of the Whetstone Mountains (pgs 8–9). These detections, in close proximity to Vigneto, underscore why it is vital that the Army Corps and El Dorado formally consult with the US Fish and Wildlife Service.

On July 17th, 2015, the Corps' Lieutenant Colonel Dennis Sugrue responded to Tucson Audubon's re-evaluation request, stating, "My regulatory Division staff is in process of gathering information and reviewing the circumstances and conditions of the permit in accordance with applicable laws and regulations, within our Regulatory authority." To date, we have yet to receive any other response from the Corps regarding their re-evaluation.

Meanwhile, the developer is moving full-steam ahead with its plans. El Dorado is working in concert with the Benson City Council to establish a "Community Facilities District" to enable the district to bond for large sums of money needed to build the extensive utility infrastructure required to serve Vigneto. To ensure that the required environmental assessments, consultations and public processes are initiated to improve conservation outcomes for Vigneto, we need you to take action now!

Write the Army Corps to thank them for re-evaluating the Section 404
 Permit. Insist the Corps conduct a full EIS and formally consult with

- the US Fish & Wildlife Service and Environmental Protection Agency on potential impacts to threatened and endangered species, migratory birds, and Waters of the US. Send letters to: William.H.Miller@usace.army.mil and Sallie.Diebolt@usace.army.mil and cc: brush.jason@epa.gov and Scott_Richardson@fws.gov.
- Write a letter to the editor or a guest opinion to your local paper about Vigneto from your own perspective. Insist that a full EIS be required to fully assess potential impacts, disclose them to the public, and provide opportunities for the general public and affected stakeholders to become better informed and engaged in shaping the development's outcomes. Please copy letters sent to: mclark@tucsonaudubon.org

See tucsonaudubon.org/conservationnews for more talking points, contact information, and recent news and opinion pieces regarding Vigneto.

VOTE YES ON PIMA COUNTY BONDS!

Tucson Audubon encourages you to vote on **November 3** in favor of the entire bond package. **Proposition 430** is especially crucial to pass for the success of Pima County's Sonoran Desert Conservation Plan. Passage of Proposition 430 will enable the conservation open space lands that are so vital to birds and biodiversity, recreation, tourism, and the health of our communities! Spread the word and learn more at tucsonaudubon.org/bondelection.

Conservation Corner

Kendall Kroesen, Urban Program Manager

There are two natural resources that Tucson has in abundance: 1) sunshine and 2) surprisingly, rainwater.

SUNSHINE

Various sources claim anywhere between 196 and 350 average annual days of sunshine in Tucson. However you measure "days of sunshine," we all know that we get a lot of it!

While most sunlight that reaches our homes and our city heats things up, causing us to run our air conditioning, sunshine can also be used to make electricity. Most of our electricity is currently from burning fossil fuels, which puts pollution and greenhouse gasses into the atmosphere. Making energy from the sun through photovoltaic panels has a very low carbon footprint—just the manufacture and transport of the panels.



Tucson Audubon's Mason Center makes more energy than it uses. See *Vermilion Flycatcher*, Vol 6o, No. 3, P. 12–13; Kendall Kroesen



Cisterns and tanks at the Mason Center have over 5,000 gallons of storage capacity, Kendall Kroesen

RAINWATER

Okay, water is abundant *for a desert*! Few other deserts get the 9–12 inches that Tucson does in a typical year, and in many parts of southeast Arizona, the average rainfall is even higher. By one estimate, 85 billion gallons of rain fall on the city of Tucson in the average year.

In western states, water extraction for agriculture and potable water directly contributes to decline of wildlife habitat. Our extraction of water from rivers or from the ground has dried up whole rivers and reduced the biological productivity of the Colorado River Delta by 95%. If Tucson can shift most of its outdoor water needs to rainwater (either captured directly into the soil in basins, or stored in tanks for later use), we can achieve big reductions in potable water usage.

Search online for "Tucson solar energy" and "Tucson rainwater harvesting" for a variety of resources, rebates, and incentives; or contact me for advice: (520) 209-1806 or kkroesen@tucsonaudubon.org.



Tucson Audubon thanks our Birds & **Business Alliance** Members, who have shown their support for bird conservation

through annual contributions and in-kind donations. Please show you appreciate their support for us by supporting them. Visit tucsonaudubon.org/alliance for more info, including links to member websites.

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SOUTHEASTERN ARIZONA— **DAY TRIPS OFFERED YEAR-ROUND**

Local birding guides based in Tucson and Portal. We specialize in providing flexible, personalized bird watching trips year-round in southeastern Arizona. Whether an individual or a large group, we can plan a custom trip for any number of days. We know where the birds are and how to find them! We also enjoy sharing knowledge about all other aspects of natural history (plants, mammals, reptiles, insects, etc).

ROCKJUMPER—WORLDWIDE **BIRDING ADVENTURES**

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MALAYSIA & BORNEO— **RAINFOREST BIRDS & MAMMALS II**

June 6-24, 2016 Tour Price: \$5510

Rockjumper's Malaysia & Borneo—Rainforest Birds and Mammals tour visits some of the world's most famous birdwatching sites. From Fraser's Hill to the Danum Valley, we will seek out stunning species of pittas, hornbills, trogons, broadbills, bee-eaters, and kingfishers while also enjoying memorable experiences with orangutans and proboscis monkeys.

BIRDING FINLAND & SWEDEN

May 9-20, 2016 Tour Price: \$4580

The Scandinavian countries of Finland and Sweden offer unbeatable temperate zone birding, spectacular scenery, and villages steeped in history. Our comprehensive tour is perfectly timed during spring and encompasses a range of habitats, maximizing our chance at all of the region's specialities. Highlights include: Smew, Great Grey, Boreal, Ural, Eurasian Pygmy and Northern Hawk-Owls, Black Grouse, Western Capercaillie, Siberian Jay, Bohemian Waxwing, Pine Grosbeak, and Two-barred Crossbill.

SOLIPASO TOURS

solipaso.com

YUCATAN

January 9-18, 2016 Tour Price: \$3250 Leader: David MacKay

The cultural, historical, and natural diversity of the Yucatan Peninsula makes for a great trip. Our itinerary takes us to many different habitats to see most of the regional endemics. We also visit some of the magnificent archeological ruins, enjoy unique regional cuisine, and explore the still-thriving world of the Mayan culture. Bird highlights include Yucatan Flycatcher, Vireo, Woodpecker, Bobwhite, Jay, White-bellied Wren, Orange Oriole, Ruddy Crake, Rose-throated Tanager, Mexican Sheartail, and Gray-throated Chat. Starts in Cancun and ends in Merida.



WEST MEXICO

February 4-18, 2016 Tour Price: \$4350 Leader: David MacKay

A birding adventure through some of the richest bird country of Mexico, from Mazatlan to Manzanillo. The tropics begin just south of Tucson in the state of Sonora and arrive in force by the time you reach Mazatlan. An extensive variety of habitats and micro-climates are available in this rather small geographic region. Between the northern Sierra Madre along the Durango Highway, the tropical lowlands of San Blas, and the dramatic central volcanic belt, it is possible to see more than a third of the bird species that exist in the entire country, including more than 55 endemics! Beyond the excellent birding, this area is home to a mind-boggling variety of plants and treesone of the most biodiverse regions on earth!

Weekly bird walks are listed at tucsonaudubon.org/fieldtrips

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

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

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

Rare Bird Alert Listen to the latest rare bird alert at 520-629-0510 x3.

Report rare birds at 520-629-0510 x3 or rarebirdalert@tucsonaudubon.org.

TUCSON AUDUBON NATURE SHOPS

When you support your local Tucson Audubon Society you are supporting birds and bird habitat conservation. Thank you!

SHOP HOURS

MAIN SHOP

Monday-Saturday, 10 AM-4 PM
Phone: 520-629-0510 ext 7015
On SE corner of University Blvd and 5th Avenue.

AGUA CALIENTE PARK SHOP

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

*Please call to confirm hours. The shop opens earlier and closes later during certain months. Nature Shop space generously provided by Pima County Natural Resources, Parks & Recreation

From Tanque Verde Rd and Houghton, continue east on Tanque Verde 2 miles. Turn left (north) onto Soldier Trail, continue north for 2 miles. Turn right (east) onto Roger Rd, continue 1/4 mile to the park entrance on the left (north).

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

TUCSON AUDUBON FIELD TRIPS

Tucson Audubon Field Trips Listings Are Now Online

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

FEATURED FIELD TRIP



NOVEMBER 7, SATURDAY, 8:00 AM SABINO CANYON

Trip Rating: Easy
Walking Distance: 4 miles
Elevation Gain: 25 feet

Ground Conditions: Rocky Trails

We'll bird Sabino Canyon Recreation Area walking a loop that includes both Sonoran desert upland and Sabino Creek riparian area. Meet at the ramada by the Visitor's Center at 5700 N Sabino Canyon Road. \$5 parking fee. Return by 11 am. Sunhat, water and walking shoes recommended. Leaders are Sabino Canyon Volunteer Naturalists.

Sign up starts October 16. Limit 15. Leaders: Jean & Mark Hengesbaugh

Sabino Canvon, JRF

Give the Gift of Membership

What do you get the birder who has everything? How can you inspire a child in your life to get more involved with birds and nature?

Want to give a gift that keeps on giving?

GIVE THE GIFT OF MEMBERSHIP!

Gift memberships are a great way to inspire others to get involved and join our community in a variety of ways by engaging them through our work. When you give the gift of membership you're not giving a onetime gift. We will send out a copy of our *Vermillion Flycatcher* magazine to the recipient of your choice!





Membership levels:

FRIEND OF TUCSON AUDUBON SOCIETY

(1 year)—\$35 includes 1-year subscription to the *Vermillion Flycatcher* and a Tucson Audubon reusable tote bag.

FAMILY FRIEND

(more than one person, 1-year)— \$50 includes 1 year subscription to the *Vermillion Flycatcher*, Tucson Audubon reusable tote



bag, and a copy of our Finding Birds in Southeast Arizona.

THE TAS-ifieds—CLASSIFIED ADS

Birder's Paradise. 41-acre ranch for sale. sonoitacreekhome.com

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

Life Abundant

A review by Rick Wright

Is it enough simply to have a lot of something? Or is true abundance more than just a number?

There are plenty of numbers in Deborah Cramer's new essay on the fortunes and future of the Red Knot, that robin-breasted sandpiper whose western Atlantic populations have declined by more than 75% in a single human generation. There are faintly encouraging statistics here too, though: the past three spring seasons on Delaware Bay have seen the stop-over population rise to some 24,000 birds in May 2015, almost 90% of which left that vital staging area pleasingly plump as they pushed on to the Arctic to breed. Despite the upward trend, full recovery is still years, maybe decades away.

As Cramer's subtitle indicates, there is more to the Red Knot's survival than just the number of birds that pass from the Arctic each year to as far south as Tierra del Fuego.

Those birds, along with some populations of Sanderlings, Semipalmated Sandpipers, Ruddy Turnstones, and Laughing Gulls, depend on the springtime bounty provided by another creature, the ancient oceanic arthropod known as the horseshoe crab. Without the extra "fuel" from billions upon billions of horseshoe crab eggs, many of the shorebirds would leave the mid-Atlantic coast late and underweight, unable to produce and care for their young. The Red Knot's problem is a horseshoe crab problem.

Cramer reminds us that the birds and the crabs have faced difficulty before. The late nineteenth century saw a boom in the aromatic business of fertilizer made of powdered horseshoe crabs, and while the contemporary evidence is surprisingly scant, it is nearly certain that this over-exploitation of the crabs resulted in significant shifts, and

likely significant declines, in shorebird populations. In the middle of the last century, crabs were again harvested by the truckload, this time to be chopped into cheap bait for fishermen. Hard-won moratoria on that practice resulted in local and temporary increases in crabs and sandpipers, but neither was truly safe.

Today, even though we know that these declining birds rely so desperately on crab eggs, we are once again removing horseshoe crabs from Atlantic waters. Once ashore, they are transported to a few laboratory facilities, where much of their blood is drawn for medical use as a highly sensitive and accurate detector of endotoxins. Theoretically, the crabs are returned to the ocean alive, but the

effects of "donating" so massively are still little understood, and it is thought that the bleeding affects female crabs disproportionately, leading to a potentially risky skew in sex ratios.

Even away from the beaches they hope to find covered with crab eggs each spring, the Red Knots face an uphill battle. The sandbars and barrier islands which many birds winter on are sinking, disappearing beneath the waters of a rising sea. Cramer is strangely coy about the causes of this change, describing it for several pages before even using the words "climate change," a phrase that should logically have introduced the discussion rather than ending it.

Horses come before carts more than once here. Cramer is a smooth, at times even elegant writer at the level of the sentence, but she is less skilled at putting sentences together in a sequence that lets the

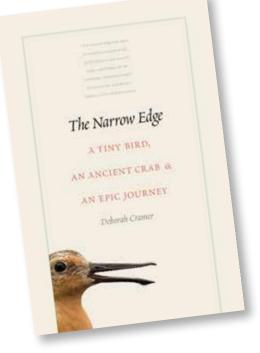
> reader follow the argument or the course of her narrative. One more rigorous editorial reading would have spared me from drawing frustrated arrows in the margins of my copy of the book.

> The difficulty may lie in that very notion of a "book." When the words are in order, Cramer tells her story reasonably well. But this is not, for many birding readers, an especially new tale. Cramer attempts to add novelty by creating a narrative of her own migration, following the birds north to Nunavut; these episodes (sometimes told in the past, sometimes in the historical present, too often in a jumble of tenses) seem only loosely appended, adding very little to the book's appeal or its originality. Worse, Cramer lets opportunities pass to make the story truly interesting: What happened at the New Jersey trial she mentions so casually? And why are there—apparently—

so many more women than men involved in knot conservation in South America? Good stories, new stories, go sadly untold here.

Rick Wright leads birding and birds and art tours for Victor Emanuel Nature Tours and is the author of the forthcoming ABA Guide to Birds of Arizona. You can follow his travels at birdaz.com/blog.

Cramer, Deborah. The Narrow Edge: A Tiny Bird, an Ancient Crab, and an Epic Journey. New Haven: Yale University Press, 2015.





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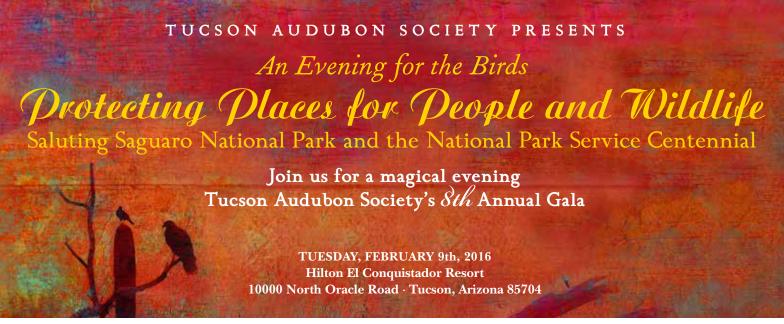
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What you can do to support Yellow-Billed Cuckoos and Tucson Audubon's work for birds.

Watch for the year-end appeal!