

Bye Bye Butter Butt

Chris Benesh



Audubon's Warbler, Marcel Holyoak



Goldman's Warbler, Dominic Sherony



Myrtle Warbler, Kelly Colgan Azar

You may have heard news of it through the birding grapevine. "I hear they are going to split Yellow-rumped Warblers!" In fact, you may feel as though you heard the same thing a few years back. If you thought that, you'd be correct. Back in 2010, a proposal was put forth to reassess species limits within Yellow-rumped Warbler. It failed owing to uncertainty as to whether the split should be three way or four way. Now that this has been largely cleared up through further research, a new proposal is before the American Ornithological Society (formerly AOU) to split Yellow-rumped Warbler into three species.

As birders, we've long been aware that there are two sorts of Yellow-rumped Warblers to be found in southern Arizona, those common yellow-throated Audubon's and the rarer white-throated Myrtle. Audubon's and Myrtle were lumped together back in 1973, after researchers concluded that the degree of hybridization evident where their ranges came into contact in Alberta warranted merging them into one species. And this was the state of things for many years. But a few things have happened in the intervening years. Researchers examining the hybrid zone have found that it has not changed in 40+ years, suggesting that the hybrids (intergrades) are not as successful as the respective subspecies. Furthermore, there has been some extensive examination of the mitochondrial and nuclear DNA, which has added new insight into how various populations are related. And while the picture of species limits is fairly clear, there remains a small degree of uncertainty regarding one of the subspecies, uncertainty that is potentially relevant to the sky islands of southeast Arizona.

But first, the basics. There are four major groups in total of what is currently Yellow-rumped Warbler. The most distinctive lives in the cool, high-elevation fir forests of Guatemala. Known as Goldman's Warbler, this form is quite striking, being extensively black with a flared yellow throat with white corners. Not surprisingly, it also has a distinctive chip note and song. Its breeding range is separated by many hundreds of miles from any other form. There is the wide-spread Myrtle Warbler, which consists of two subspecies ranging from Alaska across a broad swath of boreal North America and into the northeastern United States. Breeding males are distinctive in having a whitish eyebrow and a flared white throat patch. Next is

the Audubon's group, one or more subspecies breeding in forested mountain ranges throughout the western states and into British Columbia and Alberta (where they bump into Myrtle). While generally thought to be of one subspecies, birds breeding in Arizona up through the Rockies are sometimes described as another, slightly larger and darker subspecies, *memorabilis*. Birds that breed in Arizona average more extensively black than Audubon's elsewhere, leading to speculation that this might be the result of shared genes with a fourth major group, known as Black-fronted Warbler (subspecies *nigrifrons*). It is this fourth enigmatic form that has recently caught my attention. As is so often the case for subspecies, this rather distinctive population has been largely ignored by birders traveling to its breeding grounds in the mountains of the northern Sierra Madre. Nearly as striking as Goldman's Warbler, the breeding males are extensively black below and have largely black heads, accented by white eye crescents and a flared yellow throat.

It seems likely that Yellow-rumped Warbler will be divided up into three species as described above. But the relationship of Black-fronted Warbler to our Audubon's Warblers remains somewhat of a mystery. Studies indicate that Audubon's and Black-fronted share a lot of genetic markers not found in other Yellow-rumps indicating that gene flow has occurred at some point in the past. Is this form truly sedentary or does it occasionally wander north into Arizona? Do darker individuals seen in the Chiricahuas and Huachuclas represent Audubon's X Black-fronted intergrades? These questions will likely keep these two populations lumped together under Audubon's for the time being. I know I will be paying much closer attention to the appearance of "Yellow-rumped Warblers" during the breeding months in Arizona as well as making an effort to see and learn more about Black-fronted Warblers in northwestern Mexico. To learn more about this topic and to see images of the various forms, see bit.ly/yellowrump. ■

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

TUCSON AUDUBON SOCIETY'S 2016 ANNUAL REPORT

In 2016 Tucson Audubon took flight on a newly updated strategic plan, formally adopted in September. We reorganized and realigned accordingly, and took on new roles and responsibilities to achieve ambitious outcomes for people and birds. With our updated strategic plan we reestablished a commitment to "inspire people to enjoy and protect birds through recreation, education, conservation and restoration of the environment." It was a big agenda for our little organization and we handled it well!

During the year, we said goodbye to Tucson Audubon staff who migrated on to new opportunities and greeted new people who came onboard. We were saddened by the loss of friends who passed away, including staff member Juliette Connelly, even as our hearts were warmed by their thoughtful provisions for our continued work. We worked hard, celebrated when possible and began gearing up for what we anticipate will be a tough few years as a new administration takes office. 2016 was a year of change, transition and certainly adaptation.

You will see that Tucson Audubon continued to engage in diverse projects and programs, including a new pond in the beautiful Richard Grand Memorial Meadow at the Paton Center for Hummingbirds,

incredibly successful outreach in Benson to engage people with the San Pedro River, numerous citizen science projects like monitoring Azure bluebird nest boxes and the Tucson Bird Count, two Tucson Meet Your Birds events at Sweetwater that drew in nearly 1,000 people to view local birds, and a fascinating day with author Paul Bannick as he released his latest book, *Owl: A Year in the Lives of North American Owls*. These activities, and others like them, honed our skills and fed our excitement about offering 2017's initiative: The Year of the Hummingbird.

Above all, we are so very grateful to our members, donors, volunteers, community and partners, whose support, inspiration and energy give wings to our work. You make this work possible and we thank you with heartfelt gratitude. It is an honor to serve you through Tucson Audubon.

With warmest regards,


Karen Fogas, Executive Director


Les Corey, President

Azure Bluebird Box installation at Las Cienegas IBA, Jennie Macfarland



Trekking Rattlers in the Chiricahua Mountains, Andy Bennett



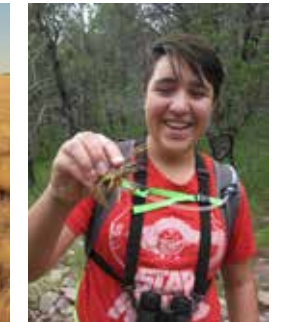
Viewing an Elegant Trogon, Southeast Arizona Birding Festival



Installing a monarch waystation at Paton's Center for Hummingbirds



San Rafael IBA, Chestnut-collared Longspur survey crew 2017, Deanna MacPhail



Youth volunteer cuckoo surveyor Dorian Escalante, Matt Griffiths

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



WE CARE FOR WILD BIRDS AND INSPIRE OTHERS TO DO THE SAME!

CONSERVATION

We study and protect wild birds and their habitats

YELLOW-BILLED CUCKOO

- Over 800 point count surveys to document Threatened Western Yellow-billed Cuckoos in Sky Island habitat (in collaboration with Coronado National Forest) as well as lower elevation riparian zones. Over 400 hours of survey time, 20 routes covered by 25 volunteers and 8 staff.
- Wrote one resource brief for the Sky Island Restoration Cooperative annual report regarding our work on Yellow-billed Cuckoos. Also produced updated annual report on Sky Island cuckoos based on surveys on forest service lands, Pima County, Tucson Audubon, and The Nature Conservancy properties.
- Based on 2015 anecdotal results, we piloted research on trogon aggression toward cuckoos using playback calls. Initial results showed no aggression response to cuckoos by trogon; however, due to constraints the experiment had to be performed before cuckoos had returned to the area and before the breeding season for either species which may have impacted results.

NEST BOX PROGRAMS

- Volunteers (including Cub Scouts and the Desert Woodworker's Club) built roughly 450 nest boxes for Lucy's Warblers, Azure Bluebirds, screech-owls, and kestrels
- Installed and monitored 150 Azure bluebird nest boxes on ranches, vineyards, and people's yards
 - 5 active bluebird nests, also nests of Ash-throated and Dusky-capped Flycatchers, Bridled Titmouse, Acorn Woodpecker, Bewick's and House Wrens
 - One site an experiment with UA bluebird researchers
 - Collected roughly 150 hollow logs (oak and elderberry) to use for natural cavity vs. artificial nest box experiment in 2017
 - Sold 30 Lucy's Warbler nest boxes at fall Tucson Meet Your Birds
- Awarded two grants for nest box research experiments in 2017—one with Lucy's Warblers (Tracy Aviary) and one with Azure Bluebirds (North American Bluebird Society)
- Over 3,500 hours of survey time donated by 171 volunteers in our Important Bird Areas (IBA) Program, which is one of the most citizen-science driven and active IBA programs in the United States.
- 187 species were counted by 60 participants during 1,283 point counts surveys for the Tucson Bird Count.
- 5,000 "Recipe Cards" for creating yard habitat for 5 types of birds were distributed to the public with help from partner, Saguaro National Park.
- 1,200 people reached during Spring and Fall SAHBA Home & Garden Show where information on creating bird supporting landscapes was shared

ADVOCACY

We speak out for wild birds and their homes

- 325 "I love the San Pedro River because ..." postcards completed by the public and sent to Benson City Administrators, US Fish & Wildlife Service, Bureau of Land Management and The Army Corps of Engineers
- 6,000 citizens informed by Tucson Audubon about pressing threats via email alerts, the *Vermillion Flycatcher* and our coalition networks
- Numerous additional units of critical habitat designations for the Threatened Western Yellow-billed Cuckoo in multiple sky island mountain ranges
- One 404 Permit suspended by The Army Corps of Engineers for Whetstone Ranch (a.k.a Villages at Vigneto)
- Two legislative attacks on Arizona's Groundwater Management Act defeated by conservation partners, including Tucson Audubon
- Numerous coalition letters on important policy issues. Examples include: window stirkes/federal buildings introduced legislation, pollinator-poisoning pesticides/neonics, Migratory Bird Treaty Act incidental take permitting, proposed Resolution Copper mine at Oak Flat, protecting the Endangered Species Act, the value of distributed energy generation, EPA authority over mining-related financial assurance, strengthening the take rule for bald and golden eagles, and more.

RESTORATION

We create sustainable wild bird habitat

- Completed a baseline survey and report on the Arnett Creek for the Arizona Wilderness Coalition. Report focused on Yellow-billed Cuckoos, Lowland Leopard Frogs, endangered minnows, and vegetative characteristics of the project reach.
- Salvaged 15 Saguaros, 15 barrel cactus, 5 hedgehog cactus, and 70 pincushion cactus from road expansion along Cortaro Rd; plants were relocated to the Mason Center for Education and Ironwood Preservation.
- Completed baseline surveys for In-lieu Fee Mitigation project on lower Santa Cruz River, completed multiple scoping options for project.
- Awarded two grants through Partners for Fish and Wildlife for projects around Patagonia to support cuckoos, hummingbirds, and pollinators, including on the 5-acre parcel adjacent to the Paton Center for Hummingbird rds.
- Installed Monarch Waystations in collaboration with the Arizona-Sonora Desert Museum at the Paton Center for Hummingbirds and at the Mason Center for Education and Ironwood Preservation.
- Presented on Tucson Audubon restoration work along the Santa Cruz River at the Santa Cruz River Research Days Symposium.

ENGAGEMENT

We help people connect with wild birds

- 2,808 participants went on 182 birding field trips to 49 Arizona hotspots
- 377 volunteers put in 9,627 volunteer hours in support of our mission
- We had 361 Southeast Arizona Birding Festival participants from 37 states and 2 foreign countries. There were 37 field trips led by 31 trip leaders
- 19 adult education classes and workshops were offered
- 5 youth education classes and workshops were offered
- Engaged 326 youth in various programs and 14 outings
- Our Nature Shops welcomed 5,326 members and other visitors
- Our Storytelling on the San Pedro event drew 140 people
- Totally Owlrageous: A Day with Paul Bannick drew 133
- 900 people came to Tucson Meet Your Birds in February, 425 to the October edition
- The 20 Living With Nature Programs drew 1131 people

Over 3,500 hours of survey time donated by 171 volunteers in our Important Bird Areas (IBA) Program



Tucson Meet Your Birds at Sweetwater Wetlands, Sara Grimm

Over 800 point count surveys to document Threatened Western Yellow-billed Cuckoos



Axhel Munoz teaches youth about riparian ecosystems

325 "I love the San Pedro River because ..." postcards completed by the public



Grand Canyon IBA event, October 2016



Yellow-billed Cuckoo Survey, Rincon Mountains

Salvaged 15 Saguaros, 15 barrel cactus, 5 hedgehog cactus, and 70 pincushion cactus from road expansion along Cortaro Rd

361 Southeast Arizona Birding Festival participants from 37 states and 2 foreign countries. There were 37 field trips led by 31 trip leaders



Volunteers Peter Bengtson and Nancy Young Wright, Joanna Strohn

377 volunteers put in 9,627 volunteer hours



Trekking Rattlers exploring southeast Arizona

Officers, Board and Staff

EXECUTIVE OFFICERS AND BOARD

Les Corey - President, Retired
 Mary Walker - Vice President, Retired
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 Ardeth Barnhart - UA Renewable Energy Network
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 David Dunford - Retired
 Jesus Garcia - Education Specialist with Arizona-Sonora Desert Museum
 Tricia Gerrodette
 Laurans Halsey - Self-employed
 Kathy Jacobs - Director of Center for Climate Adaptation Science and Solutions with the Institute of the Environment
 Cynthia Pruett
 Nancy Young Wright - former AZ legislator

STAFF

Keith Ashley, Director of Resource Development & Strategic Operations - 4 years
 Andy Bennett, Restoration Project Manager, K-12 Youth Engagement Coordinator - 6 years
 Karen Fogas, Executive Director - 2 years
 Matt Griffiths, Digital Media Coordinator - 11 years
 Kari Hackney, Restoration Intern - 6 months
 Jan Holder, Engagement Director - 1 year
 Debbie Honan, Retail Coordinator - 1 year
 Jonathan Horst, Director of Conservation & Research - 5 years
 Helen Kim, Membership & Communications Director - 1 year
 Mark Krietemeyer, Finance Director - 1 year
 Rodd Lancaster, Field Crew Supervisor - 15 years
 Daniel Lehman, Restoration Crew - 9 years
 Kim Lopez, Accountant - 6 months
 Jonathan Lutz, Paton Center for Hummingbirds Coordinator - 1 year
 Jennie MacFarland, Bird Conservation Biologist - 7 years
 Kimberly Matsushino, Retail & Operations Assistant - 2 years
 Olya Phillips, Bird Survey Assistant - 2 years
 Diana Rosenblum, Membership Coordinator - 3 years
 Luke Safford, Volunteer and Field Trips Coordinator - 1 year

FEDERAL LANDS FOCUSED STAFF

Moez Ali	Nicole Gonzales	Alecio O'Day
Matt Christensen	Cassandra Hall	David Pinigis
Ben Cooper	Andrea Hazelton	Ethan Sandoval
Bethany Derango	Melanie Jones	
Elise Dillingham	Jessica McGarey	



Tucson Audubon Society Board of Directors



Tucson Audubon Society Staff, December 2016

Partners in Conservation

American Birding Association
 American Bird Conservancy
 Arizona State Forestry
 Arizona Wilderness Coalition
 Arizona-Sonora Desert Museum
 ArtPlace America
 Audubon Arizona
 Audubon Urban Chapter Network
 Billy Lane Laffer Middle School
 Biosphere 2
 Borderlands Restoration
 Bureau of Land Management
 Cascabel Conservation Association

Coalition for Sonoran Desert Protection
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 Cornell Lab of Ornithology
 Coronado National Forest
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 Desert Landscape Conservation Cooperative
 Desert Rivers Audubon
 Desert Survivors
 Farmers Investment Company
 Friends of the San Pedro River
 Green Valley Recreation, Inc.
 Ironwood Tree Experience
 Lower San Pedro Watershed Alliance
 Manzo Elementary School
 National Audubon
 National Park Service
 Nature and Culture International
 Nighthawk Natives
 Patagonia Area Resource Alliance

Patagonia Creative Arts Association
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 Pima County Department of Community and Economic Development
 Pima County Natural Resources, Parks, and Recreation
 Pima County Regional Flood Control District
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 Save the Scenic Santa Ritas
 Sky Island Alliance
 Sonoran Audubon Society
 Sonoran Institute
 Sonoran Joint Venture
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 Town of Marana
 Trust for Public Land
 Tucson Water

Tumamoc: People and Habitats
 University of Arizona Department of Ecology and Evolutionary Biology
 University of Arizona School of Geography & Development
 University of Arizona School of Natural Resources and the Environment
 University of Arizona Water Resources Research Center
 U.S. Army Corps of Engineers
 U.S. Fish & Wildlife Service
 U.S. Forest Service
 Victor Emanuel Nature Tours
 Watershed Management Group
 Western National Parks Association
 Western Rivers Action Network
 Wildlands Restoration
 WOW Arizona

Tucson Audubon Society Income & Expenses Summary

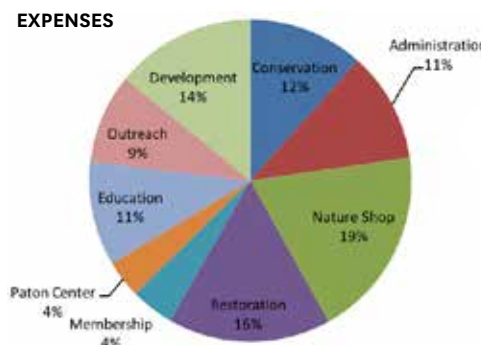
For the Year Ended December 31, 2016

Income	\$1,484,676
Expenses	(1,458,725)
Investment Activity	(10,474)
NET	\$15,477

INCOME



EXPENSES



BIRDS
BENEFIT
BUSINESS
Alliance

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

LEADING

Carl Zeiss Sports Optics
 Circle Z Ranch
 Crown Community Development—Arizona Farmers Investment Co (FICO)
 GeolInnovation LLC
 Riverpark Inn
 Tucson Electric Power
 Western National Parks Association

SUSTAINING

Celestron
 Kimberlyn Drew, Realtor
 Leica Sport Optics
 Rockjumper BirdingTours
 Swarovski Optik

SUPPORTING

Heartstone Ranch/La Cocina

CONTRIBUTING

Affinity Wealth Management
 Arizona Birder Casitas
 Candlewood Suites
 Chuparosa Inn
 Financial Architects
 Opticron USA
 Originate Natural Building
 Materials Showroom
 Santa Fe Ranch Foundation
 Solipaso Tours
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PAPUA NEW GUINEA – BIRDING IN PARADISE V 2017

Date: July 25–August 11, 2017 (18 Days)

Price: \$8,256

Tour Leader: Wayne Jones

3 Spaces Available

Traversing by air, road and boat, our 18-day tour through Papua New Guinea is set to enchant participants with the truly immaculate avian highlights available in this remarkably under-travelled country. No less than 25 Bird-of-paradise species are possible as we move through habitats of winding lowland rivers, sprawling grasslands, rich highland ecosystems and lush forested valleys.

COSTA RICA – CLOUD FOREST & QUETZALS 2017

Date: May 15–28, 2017 (14 Days)

Price: \$4,300

Tour Leader: Dušan Brinkhuizen

2 Spaces Available

Our comprehensive tour of Costa Rica aims to explore a myriad of incredible habitats in search of the striking bird species available here. Two extensions are also available: the preceding extension takes us to Rancho Naturalista—one of the premier birding lodges in Central America, and the succeeding extension explores the remote Caribbean shores of neighbouring Nicaragua.

SOLIPASO TOURS solipaso.com

BAJA BIRDS AND WINE

Date: September 17–23, 2017

Price: \$2900

Leader: David MacKay.

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



Thick-billed Parrot, Mark Dumont

MADERA: THICK-BILLED PARROTS

Date: August 14–17

Price: \$1250

Leader: David MacKay

A short trip into northern Chihuahua to see the highly endemic Thick-billed Parrot and Eared Quetzal. Summertime in the Sierra Madre is a sight to see with green meadows, lakes, blue sky vistas and monsoons! The trip starts in Tucson and we bird the pinyon-juniper habitat on the way to Nuevo Casas Grandes. We visit the remote Paquime ruins site, Cuarenta Casas then spend two nights in the Madera area to see the Thick-billed Parrots in their nesting habitat, along with many other high elevation species.



Resplendent Quetzal, Tom Benson

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