

44th Western Field Ornithologists Conference

The 44th annual conference of the Western Field Ornithologists was held at the Crowne Plaza Hotel in Albuquerque, New Mexico, August 21-25, 2019. A new record for a conference held outside of California was set with 236 registrants! The weather was warm as expected with a few monsoon showers to cool things off. Thanks to everyone involved the conference was a great success.

The annual WFO conference could not take place without the hard work of many dedicated WFO members. A committee of volunteers began planning conference details almost a year ago, and worked diligently up to and throughout the conference to make sure it was a success. Special thanks to the conference planning committee members: Karen Havlena, Diane Rose and husband Steve, Kurt Leuschner, Chris Swarth, John Harris, Allie Sheehy, Jon Dunn, Steve Rottenborn, Wendy Beers, Matt Baumann, Sheryl Ferguson, John Garrett, Homer Hansen, Andy Johnson, Dave Krueper, Dr. Chris Witt, Lee Lockie, Frances Oliver, and Bryce Robinson.

Field Trips

A total of 50 field trips were held during the conference to at least 24 different locations. Most of the field trips on Thursday and Sunday were all-day trips, and Friday and Saturday's trips were half-day. A second owling trip was offered Wednesday night and a 3-day post-conference field trip was led by Jon Dunn and Dave Krueper. Twenty-four leaders (many of them locals with the New Mexico Ornithological Society or the Central New Mexico Audubon Society) volunteered their time to lead these field trips. Ali Sheehy, expert van wrangler, coordinated the 12 vans. Diane Rose handled the sign-ups. Matt Baumann and Andy Johnson helped to recruit local leaders and choose the destinations. Local guide Wezil Walraven won the prize for leading the most trips.

The field trips are a central part of every WFO conference and we couldn't do them without the help of these leaders and support staff. Over 202 bird species were recorded during the conference (not including the post-conference field trip). Some notable species included: Least Flycatcher, Hooded Warbler, Prothonotary Warbler, Dickcissel, and Orchard Oriole. A number of Red-faced, Grace's and Virginia's Warblers were sighted, three of the species featured on this year's t-shirt designed by local Albuquerque artist Wren Walraven.

Thanks to our many able and expert field trip leaders: Matt Baumann, Bryan Calk, Nancy Cox, Steve Cox, Jon Dunn, Ashli Gorbet, Kathy Granillo, Ethan Gyllenhaal, Chuck Haye, Michael Hilchey, Will Jaremko-Wright, Andy Johnson, Deven Kammerichs-Berke, Kurt Leuschner, Dave Krueper, Dave Mehlman, Nick Pederson, Nathan Pieplow, Kristen Oliver, Kim Score, Oona Takano, Ryan Terrill, Raymond VanBuskirk, and Wezil Walraven

Workshops

A total of eight workshops were held (four on Friday morning and four on Saturday morning). These workshops were well-attended and touched on a variety of topics: bird illustration, warbler identification, data-mining, identifying birds by sound, bird skin preparation, and birding in the digital age. Our workshop presenters always include many of the best field ornithologists around.

Vendors

Seven vendors provided a nice break during the science sessions. There were optics and books on display, bird art for sale, and local conservation groups were well represented including the New Mexico Ornithological Society, Central New Mexico Audubon Society, New Mexico Audubon, and the New Mexico Native Plant Society. Artists Wren Walraven and Narca Moore-Craig displayed their beautiful artwork, paintings and other items.

Thursday Night Reception/Museum Tour

This year's reception was one for the ages! Besides great food and drink on the campus of the University of New Mexico, it included a behind-the-scenes tour of the Museum of Southwestern Biology. Graduate students were on hand to showcase the bird skin collection (containing over 40,000 bird skins) that Robert Dickerman was instrumental in putting together. Current research projects were also on display. The crowd moved slowly through the museum creating a good kind of traffic jam. It was truly fascinating and inspirational. Museum director Dr. Christopher Witt and curator Andy Johnson were responsible for putting this all together.

Student Scholarships

A record number of nine scholarships were awarded to students from all over the west to attend the conference. One student was from Alaska, and others represented the states of Washington, Colorado, Arizona, California, and Oregon. The 2019 scholars were:

Keith Bruce; 16 yrs.; Kodiak; 10th grade

Ezra Cohen; 14 yrs.; Portland, Oregon; 8th grade

Will Salter; 11 yrs.; Fort Collins, Colorado; 6th grade.

Dorian Escalante; 17 yrs.; from Tucson, Arizona; 11th grade

Reed Gorner; 16 yrs.; Lakewood, Colorado; 11th grade

Cedric Kraynak; 17 yrs.; Bellingham, Washington; 11th grade

Max Leibowitz; 20 yrs.; San Diego, California; undergrad at Univ. of Arizona

John Wilson; 17 yrs.; from Taylor, Arizona; 11th grade

Julia Wong; 16 yrs.; Newport Beach, California; 10th grade

A reception for the students was held on Friday night with Guy McCaskie and other WFO luminaries attending. Homer Hansen led the students on a field trip that included a stop at the Museum of Southwestern Biology for more behind-the-scenes looks at the bird collection. More information about our scholars can be found under *Student Programs* on this website.

Science Sessions

Steve Rottenborn once again coordinated the science sessions on Friday and Saturday afternoons. A total of 15 presentations were made. Jon Hayes, head of New Mexico Audubon, kicked things off with a plenary talk on the state of New Mexico's birds highlighting the Rio Grande. This was followed by a variety of interesting talks on a wide range of topics from stable isotopes and their utility in ornithology to the musical compositions of Dvorak.

Photo ID Quiz and Sound Identification Challenge

A popular tradition at each conference is the sound identification challenge on Friday afternoon (led by bird sound expert Nathan Pieplow) and the photo ID Quiz led by Ed Harper, using his own wonderful (and tricky) photographs. As usual, our expert panel of judges got most of the photos right but were stumped on a few to the amusement of the crowd. The teams competing in the sound identification challenge were not so lucky – it was a hard-fought battle (snow bunting flight call?) but the team that emerged victorious was the “Inadequate Bananaquits.”

Keynote Address

A stimulating keynote address was given at the banquet by Dr. Christopher C. Witt. Dr. Witt is the Director and Curator of Birds at the University of New Mexico's Museum of Southwestern Biology. His talk focused on the “Hidden forces in bird evolution.” Chris explained that allopatric speciation – the general process by which geographical barriers such as rivers or mountain ranges arise and separate populations which can lead to the formation of new species – occurs very slowly in comparison to such forces as range expansions, competition, climate change and hybridization. He explained that allopatric speciation occurs too slowly to explain the global diversity of birds, which now exceeds 10,000 species (and may approach twice that number depending on how we define species!). What other factors could be at work causing speciation and avian diversity? This was the subject of his talk.

He gave several examples of recent advances in comparative ornithology and genomics, and reviewed four types of 'hidden forces' that maintain bird diversity:

- Bateson-Dobzhansky-Muller genetic incompatibilities (BDMIs).
- Adaptive gene flow between species.
- Parasite-driven wedges.
- Adaptations that set the context for ecological interactions.

For each of these “forces” he presented examples using research conducted by other scientists or by those in his own lab at the university. Research into these topics in recent years is leading some ornithologists to propose a modification to the Biological Species Concept, which currently defines a species as, “a group of interbreeding populations that are actually or potentially reproductively isolated from other such groups.”

His most intriguing example of a hidden force was of studies of physiological adaptations which can lead to ecological interactions that maintain diversity. He described experiments carried out in his lab on campus using a hypobaric chamber where his students could study hummingbird behavior under controlled conditions and altered barometric pressure.

In the southwest Broad-taileds range higher on mountain slopes than do black-chinneds. At higher elevations there is less oxygen. Where ranges overlap - at elevations of 2000 to 2,500 meters - the smaller but more pugnacious black-chinneds generally displace the larger broad-taileds. The hemoglobin of broad-taileds is slightly different than that of black-chinneds, giving it the ability to bind to oxygen at lower partial pressures than the hemoglobin found in black-chinneds. Thus, broad-taileds are better adapted to live higher on the mountain slopes. Would this condition give them an edge in encounters with black-chinneds if the latter species had to operate in a more oxygen-limiting environment? In an intriguing experiment to test this idea, Chris’s grad student Ariel Gaffney placed pairs of species (one black-chinned and one broad-tailed) together in the chamber. Then they changed the air pressure, and thus the oxygen content of the air. They conducted many trials using different pairs of hummers each time where they increased the hypobaric chamber pressure to be similar to that of the higher elevations where broad-taileds are common and where black-chinneds do not normally occur. When they did this they found that the black-chinneds lost their edge, were much less feisty, and the broad-taileds dominated aggressive interactions. Dominance had become reversed! Apparently the black-chinneds became stressed under conditions of low pressure a oxygen, and their hemoglobin is less able to bind to oxygen. This is an elegant example of how a physiological adaptation can maintain range separation, and influence ecological and behavioral interactions between similar species – which might serve to maintain diversity. Chris showed a video of the hummers in the chamber with the broad-tailed dominating the black-chinned. Thanks to the quick action of WFO young scholar Will Salter who pressed the right buttons to run the video on the laptop!) Dr. Witt’s talk stimulated our thinking and gave food for thought as we ponder the amazing diversity of birds in the West.

Plenary Talk

The plenary talk was given by Jon Hayes, Executive Director of Audubon New Mexico. Jon directs conservation projects that protect the Rio Grande River ecosystem, improve grassland habitat on private grazing lands, and raise public awareness of bird conservation issues. His presentation focused on the Rio Grande, the second longest river in the continental U.S., and the fifth longest river in North America. The Rio Grande flows for 1,900 miles from the San Juan Mountains in southern Colorado to the Gulf of Mexico in Texas. The ecosystem supplies irrigation for food production in both the U.S. and Mexico as well as renewable drinking water for fast growing urban centers on either side of the international

border. Jon called the Rio Grande one of the most iconic rivers in the western United States and he described its critical importance for a wide variety of bird species that depend on the river's open water as well on as the wetlands and riparian habitats bordering its length.

The Rio Grande supports large-scale ecological processes like continental migration of hundreds of thousands of birds, bats, and butterflies, including vital habitat for seven of the eight Audubon priority bird species for riparian areas in the west – Sandhill Crane, Western Yellow-billed Cuckoo, Southwestern Willow Flycatcher, Bell's Vireo, Yellow Warbler, Yellow-breasted Chat and Summer Tanager. In New Mexico, the Rio Grande supports up to 20,000 cranes each year; 90% of the Rocky Mountain population spends the winter along the river's floodplain. Jon emphasized the need to balance important ecosystem needs with those of agriculture and other societal needs. His talk, given with enthusiasm and wit, explored the ecology of this system, the many conservation challenges and local efforts underway to ensure the river endures as a resilient and verdant ribbon of life for the human and natural communities that depend on it.

Outstanding Service Awards

WFO's Outstanding Service Award was presented this year at our banquet to two well-deserving individuals: Edward Pandolfino and Diane Rose. After an introduction by Jon Dunn, chair of the awards committee, each recipient received a framed certificate and a framed Andy Birch painting of a Sabine's Gull.

Both Ed and Diane have been very active and dedicated members of WFO over the years. Ed Pandolfino has served on the board and also served a term as President of WFO. He was instrumental in developing our current guidelines for the difficult and increasingly complex task of planning the annual conference. Each year our conference seems to get bigger and more popular, and much of this success can be accredited to Ed. Ed is back on the board and already helping to plan our conference in Reno next year!

Diane Rose is also a former (and current) WFO board member who is equally important when it comes to putting on a successful conference. She works hard all year preparing the next conference schedule (that includes writeups of all field trips and workshops), keeping up with the always-changing software programs, getting WFO members registered, and then dealing the multitude of changes that continue up until the last second of the conference! It's a daunting task and we are so grateful for her service and dedication to WFO.

Silent Auction

Our annual silent auction this year included numerous book titles and a number of art pieces featuring the artwork of Wren Walraven, our own Andy Johnson (in memory of Robert Dickerman), and some fantastic pieces of art donated by the estate of Robert Dickerman (part of his personal bird art collection). Heath Wakelee of Sierra Foothills Audubon donated a record number of books. All together we raised over \$3,000 to be shared equally by our WFO Publications and Student Programs committees.

WFO Books Published in 2019

The Birds of Gambell and St. Lawrence Island by Paul Lehman made its debut at our Albuquerque conference. Pre-orders were taken at a discounted rate for this book that is scheduled to be published before the end of the year. It will be available in hard copy form by ordering off of our website: westernfieldornithologists.org. Purchase of a hard copy will include a PDF version. It will also be available as an e-book at a reduced rate.

Board of Directors Meeting



The Board of Directors held their annual meeting on Thursday, August 22. The board voted to reconfirm the officers for 2019-2020 with Kurt Leuschner as President and Jon Dunn as Vice-President. Two directors, John Garrett and Daniel Gibson, completed their terms on the board and were thanked for their service to the organization. Kimball Garrett and Karen Havlena were reconfirmed to serve three more years on the board. Two new directors, Diane Rose and Edward Pandolfino, were nominated by the board and elected by the membership at the general meeting on Saturday. Ed is a former WFO president and Diane served on the board in 2016-2018. They will begin serving the first of two three-year terms.

The board voted to continue to offer 8 scholarships for young students to attend the annual conference. Up to two of these scholarships will be available to college undergraduates. A science subcommittee was formed under the guidance of the student programs committee. This new subcommittee will be in charge of awarding annual stipends to qualifying graduate students who will present their research findings at our science session.

A working retreat of WFO officers is planned for 10-13 October 2019 in Palm Desert. Long-term planning will be a focus of this retreat, plus a day at the Salton Sea with Guy McCaskie. WFO sponsored field trips to Colombia in November led by Phil Unitt, and to Tasmania in January led by Kurt Leuschner have filled to capacity. Another trip to Cuba is expected in late 2020.

It was announced that our next conference will be held September 9-13, 2020 at the Whitney Peak Hotel in Reno, Nevada. Many outstanding field trip locations are within fairly close proximity to Reno. The conference will be held in a non-smoking hotel. We will be celebrating our 50th year as an organization in 2020 and will have a number of special events to mark this important anniversary.

See you in Reno September 9-13, 2020!
Help celebrate WFO's 50th anniversary!

Kurt Leuschner
WFO President