

KANSAS ORNITHOLOGICAL SOCIETY

77th Annual Meeting



**Southwestern College
Winfield, Kansas**

25 - 27 September 2026

Schedule of Events

Friday, September 25

7:00-9:00 p.m. Informal gathering in the Beech Science Center Foyer. An opportunity to visit with old friends and make some new friends!

Saturday, September 26

9:00 a.m. - Registration – Darbeth Hall Foyer

10:00 a.m. - Welcome and morning paper session in Messenger Auditorium

11:30 a.m. (or immediately after the last morning paper) - KOS Business Meeting

11:45 a.m. – Lunch on your own. KOS Board Meeting – location will be announced. The Southwestern College Cafeteria will be serving lunch

1:30 – 2:30 p.m. – Birdwatchers Hour. An opportunity for you to show your bird photos from the past year. Please bring your photos on a flash drive. Messenger Auditorium

2:30 (or as soon as Birdwatchers Hour ends) - 4:00 p.m. – Afternoon paper session, Messenger Auditorium

KOS Business Meeting will resume immediately following the last presented paper if needed.

7:00 – 9:00 p.m. – Banquet, awards and speaker. Smith Student Center. Mark Robbins, Collections Manager, Ornithology, Retired, University of Kansas Natural History Museum.

Albatross, Penguins & Icebergs

Sunday, September 28

7:00 a.m. – Half day field trips will tentatively include: Slate Creek Wetlands (Sumner County); Winfield City Lake (Cowley County); Chaplin Nature Center (Cowley County), and other areas around Winfield (Cowley County). Gather in the parking lot north of Beech Science Center. Sign-up sheets will be provided Friday evening and all-day Saturday. Field trip locations may change based on participation sign-up and access availability.

12:30 p.m. – Compilation location will be at the large pavilion in Island Park (north side of Winfield adjacent to the river and US 77 Highway.) **There is no box lunch option - bring your own lunch!**

KOS Officer/Board Slate for 2026 – 2027

President – Mike Rader
Vice President – Andrew George
Corresponding Secretary – Chuck Otte
Membership Secretary – Jeff Calhoun
Treasurer – Max Thompson
Business Manager – Malcolm Gold
Editor, *The Bulletin* – Eugene Young
Editor, *The Horned Lark* – Trish Remley

Board Member – Christopher Frick
Board Member – Kevin Groeneweg

Positions not needing a vote

Board Member – Glenn Caspers
Board Member – Jennifer Jones
Past President – Kurtis Meier

Presented Paper Abstracts

*Presenter denoted by **

Morning Session

Zosterops in the Eastern Solomon Islands: Sympatry with No Evidence of Gene Flow

Ryan M. Andrews, Lucas H. DeCicco, Robert G. Moyle*

Biodiversity Institute and Natural History Museum, University of Kansas, Lawrence, KS

Zosterops is a genus of small passerine birds, known colloquially as ‘white-eyes’ for their characteristic white eye rings. *Zosterops* is the most speciose avian genus in the world, with 111 species currently recognized distributed across Africa, southern Asia, the South Pacific, and Australia. *Zosterops* is especially diverse in the Indo-Pacific, with many species endemic to individual or groups of islands. In areas of sympatry, species often experience habitat or ecological niche shifts, where one species may retreat to higher elevations over evolutionary time while another remains in the lowlands. In several cases, sympatric species of *Zosterops* show evidence of gene flow, both ongoing and ancient. Here, we use restriction site-associated DNA sequence (RADseq) data generated from specimen-vouchered tissue samples to investigate two cases of sympatry on small islands with no elevational or habitat gradients in the eastern Solomon Islands. We performed both phylogenetic and population genetics analyses, including testing for gene flow. Phylogenetic analyses reinforced patterns of relatedness found in previous publications, whereas no evidence for gene flow was uncovered. Our results suggest barriers, either genomic or ecological, may inhibit gene flow, informing future research.

Nesting Ecology of Prothonotary Warblers on Abandoned Mined Lands

Gabe McClain, Andrew George, Department of Biology, Pittsburg State University, Pittsburg, KS*

The Prothonotary Warbler is a Neotropical migrant songbird that nests in tree cavities in forested wetlands. Despite declines in coastal regions due to habitat loss, Prothonotary Warbler populations may be increasing along the western edge of their geographic range, where disturbance from past strip mining has resulted in extensive secondary nesting habitat. In this study, we compare population demographics and migration patterns of Prothonotary Warblers between mined and unmined habitats in a region where they have not been previously studied. We placed 210 nest boxes on 6 mined and 6 unmined sites in the region and monitored their nest success and spatial movements across two breeding seasons. We also color banded adult birds on each site to monitor site fidelity between breeding seasons. Additionally, we are collaborating with local Audubon chapters to monitor nests outside of our study sites and attach light-level geolocators to a subset of Prothonotary Warblers to monitor migratory routes and wintering grounds. Results from our study will 1) help determine the conservation value of abandoned mined lands for migratory songbirds, and 2) describe the dispersal and migration routes of western Prothonotary Warblers.

One Hundred Fifty Years of Avian Community Change: Analyzing Kansas Bird Communities Using Historical and Modern Records

*Nikki Lemus^{*1,2}, Ryan Andrews^{1,2}, Jacob Cooper³, Joanna Corimanya^{1,2}, Katherine Crawford^{1,2}, Lucas DeCicco^{1,2}, Abigail Perkins^{1,2}, Chase Perkins^{1,2}, A. Townsend Peterson^{1,2}*

¹University of Kansas, Lawrence, KS, ²KU Biodiversity Institute, Lawrence, KS, ³University of Nebraska at Kearney, Kearney, NE

Land usage and climate have changed radically over the last 150 years, owing in great part to human activity; how those changes affect bird communities is not well understood. Although effects of various factors on different species are complex, historical specimen series allow comparisons over decades or centuries. The University of Kansas Biodiversity Institute (BI) holds the specimens and field journals of Charles D. Bunker and his colleagues, who characterized the biodiversity of the state of Kansas in the early 1900s and created a detailed record of bird communities across the state. Since 2020, BI personnel launched the Bunker Resurvey Project to revisit Bunker's collection sites for repeat surveys, enabling exciting comparisons across a century of change. Using historical and modern records of species presences at sites across Kansas, we analyze the community composition and distributional changes over the last hundred fifty years. Results will show broad patterns at the level of order and family and species-specific patterns that reveal that avian communities do not respond to environmental changes as a monolith. Rather, individual species have expanded or contracted their distributions: forest-associated species are now far more broadly spread across the state, and prairie-associated species are generally more restricted and fragmented. Additionally, range shifts have introduced new species to Kansas avian communities by way of non-native introductions and climate change-driven northern expansions. More generally, this study illustrates the timely and invaluable worth of historical collections, and the broad temporal perspective that they can offer to biological studies.

Conservation Reserve Program Grasslands Influence Breeding Season Survival in Greater Prairie-Chickens in Kansas and Nebraska

*Ryan C. Giordanelli^{*1}, Dan Sullins², Dave Haukos², Sarah Sonsthagen³*

¹Division of Biology, Kansas State University, ²U.S. Geological Survey Kansas Cooperative Fish & Wildlife Unit, ³U.S. Geological Survey Nebraska Cooperative Fish & Wildlife Unit

The breeding season is the most vulnerable and stressful time for adult female Greater Prairie-Chickens. Understanding their survival during this period (March 16th-September 15th) across their distribution in Kansas and Nebraska and influence of Conservation Reserve Program (CRP) grasslands at landscape scales is essential for informing species management and sustainable populations. In 2025 and 2026, we tracked 327 female Greater Prairie-Chickens with GPS transmitters among seven study sites in Kansas and Nebraska that differ in CRP practice (general vs. grassland) and CRP composition. We used Kaplan-Meier survival curves and Cox proportional hazard models to evaluate survival in the context of CRP. Over the 2025 and 2026 breeding season the most important factor of survival was if a female ever used any CRP enrolled property during the season (HR = -0.71, SE 0.2253, p value = 0.002). Both the use of general and grassland CRP decreased mortality risk and were informative at 85% confidence intervals. Our results underscore the survival benefits of CRP in fragmented landscapes for female Greater Prairie-Chickens during a key life-stage and the importance of CRP for continued population persistence.

Genomics of Chickadee Hybridization in Southeastern Kansas

Abigail Perkins, Mark Robbins, A. Townsend Peterson*
University of Kansas Biodiversity Institute, Lawrence, KS

Hybrid zones offer critical insights into speciation, gene flow, and species' response to climatic change. geographic distributions. Black-capped Chickadees (*Poecile atricapillus*) and Carolina Chickadees (*P. carolinensis*) form a hybrid zone that stretches across the eastern United States, starting in southern Kansas and crossing eastward to the mid-Atlantic coast. While the central (Ohio) and eastern (Pennsylvania) regions of this hybrid zone have been extensively studied both genetically and ecologically, the western extreme remains understudied despite unique geographic and climatic differences. Notably, studies of the easternmost section suggest the contact area is rapidly shifting northward, and a recent study of the contact area in Missouri showed a much less dramatic shift over time. Here, I will briefly review current scientific knowledge of the secondary contact of Black-capped and Carolina Chickadees. I will also present preliminary results from the first whole-genome data of this *Poecile* hybrid zone, representing the westernmost extent of the contact zone centered on Neosho Falls, Kansas.

The Hybridization of Eastern and Spotted Towhees in Nebraska

*Katherine J. Crawford*¹, Ryan M. Andrews¹, Lucas H. DeCicco¹, Devon A. DeRaad^{1,2}, Lukas B. Klicka³, Robert G. Moyle¹*

¹University of Kansas, Biodiversity Institute, ²University of California Los Angeles, ³Peru State University

The Spotted Towhee (*Pipilo maculatus*) and Eastern Towhee (*P. erythrophthalmus*) hybridize commonly where they meet along riparian corridors in the Great Plains. In the 1950s, researchers collected research specimens of towhees along the Niobrara River in Nebraska to study this hybrid zone. Previously considered one species, the Rufous-sided Towhee, they were split in 1995 due to a higher mitochondrial divergence than other subspecies comparisons. There has been no research published on the nuclear genetic relationship between these two species. Since 2022, researchers at the University of Kansas and other collaborators have returned to the Niobrara River corridor, collecting research specimens at the historical sites and expanding sampling to more sites. We have now produced whole genome DNA sequencing data from specimen vouchered tissue samples from along this transect and have performed population genetic and phylogenetic analyses to determine the extent of hybridization. We found widespread, late-generation hybridization in the nuclear genome and confirmed the presence of distinct mitochondrial haplotypes, occurring in a gradient along the hybrid zone. These results support the hypothesis of an ancient, Pleistocene-mediated separation of populations, followed by continuous gene flow. This system gives us a window into the process of speciation, and what it can look like when species fail to maintain reproductive isolation.

Afternoon Session

Wheat Fields in the Wheat State: Good, Bad, or Ugly for Grassland Birds?

William E. Jensen, School of Science and Mathematics, Emporia State University

Grassland birds are exhibiting the steepest population declines of any avian habitat guild and have lost great expanses habitat, chiefly to cropland agriculture. Crop fields are ecologically sterile and potentially dangerous environments for most wildlife. But do these areas of intensive agriculture offer some underestimated alternate habitat for some species? Crop fields might simply be uninhabitable displacements of native prairie habitats for many grassland birds (“bad”). At worst (“ugly”), these alternate cropland habitats might constitute ecological traps where, if used, survival and reproduction are compromised. But perhaps for some species, ecologically simple croplands might offer—at least temporarily—places to survive and successfully breed. Given the tremendous expanse of cropland in the Great Plains, nesting successes in these fields might translate to considerable recruitment at population scales (some “good”?). These possibilities are discussed with particular focus on observations of Grasshopper Sparrow (*Ammodramus savannarum*) during their breeding season, but there is possible relevance to other grassland birds. Increased attention to grassland bird nesting activity in crop fields, especially wheat stubble, might be warranted.

Status of the Greater Prairie-Chicken in Kansas

Mark B. Robbins and A. Townsend Peterson,
University of Kansas Biodiversity Institute, Lawrence, KS*

Greater Prairie-Chickens have undergone a massive population decline and range contraction. Through the 1990s, the Flint Hills were considered the core area in Kansas, and perhaps the most significant population center for the entire species. Since that period, however, the species has gone through dramatic declines at many sites across its range. We recently (2022-2026) resurveyed two sites in the Flint Hills, in Greenwood and Chase counties, Kansas, that had been the subjects of intensive studies 25-40 years ago. We documented major declines, 70% and 80%, respectively, in the number of leks at both sites. To broaden the scope of our geographic monitoring of the species, in 2026, we initiated resurveys of Kansas Parks and Wildlife routes across the entire distribution of the species in Kansas—we present a progress report and preliminary results of that statewide study.

KDWP Ecological Services Bird Conservation and Research Update

Jordan Hofmeier, Kansas Department of Wildlife and Parks

The Ecological Services Division of Kansas Department of Wildlife and Parks is charged with conserving nongame and imperiled species across Kansas. This presentation will provide a brief overview of the Division, ongoing conservation efforts, and upcoming bird research projects.

After the presentation, KDWP is interested to hear the group's thoughts on data gaps and research needs for nongame bird species in Kansas.

2025-2026 KOS Board

President – Mike Rader

Vice President – Andrew George

Corresponding Secretary – Chuck Otte

Membership Secretary – Jeff Calhoun

Treasurer – Max Thompson

Business Manager – Malcolm Gold

Editor, *The Bulletin* – Eugene Young

Editor, *The Horned Lark* – Trish Remley

Board Member – Lucas DeCicco

Board Member – Kevin Groeneweg

Board Member – Glen Caspers

Board Member – Jennifer Jones

Past President – Kurtis Meier

***Thank you to Max Thompson and Southwestern College for
hosting the 77th KOS Fall Annual Meeting!***