

KANSAS ORNITHOLOGICAL SOCIETY

76th Annual Meeting



**Pittsburg State University
Pittsburg, Kansas**

26 - 28 September 2025

Schedule of Events

Friday, September 26

7:00-9:00 p.m. Informal gathering at the Heritage Room, Pittsburg State University (PSU) Overman Student Center. An opportunity to visit with old friends and make some new friends!

Saturday, September 27

Take advantage of a later start to bird in and around the Pittsburg State University campus and the greater Pittsburg area!

9:00 a.m. - Registration outside the Governor's Room in PSU Overman Student Center

10:00 a.m. - Welcome and morning paper session in the Governor's Room

11:15 a.m. (or immediately after the last morning paper) - KOS Business Meeting

11:45 a.m. – Lunch on your own. KOS Board Meeting - Prairie Room (across the hall from the Governor's Room in Overman Student Center)

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.

2:30 - 4:00 p.m. – Afternoon paper session, Governor's Room

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

7:00 – 9:00 p.m. – Banquet, awards and speaker. Wilkinson Alumni Center. Dr. Tim O'Connell, Oklahoma State University is the banquet speaker. His presentation is titled, ***"Teaching ornithology with the wisdom of Merlin at your side"***

Sunday, September 28

7:00 a.m. – Half day field trips around the Pittsburg area. Gather outside Yates Hall on PSU Campus. Field trip locations will be announced Friday evening and Saturday during sessions.

12:30 p.m. – Compilation at one of the picnic shelters around University Lake (look for everyone wearing binoculars). This is just east of the football stadium. Parking is available on the northeast corner of the stadium, just north of the lake. **There is no box lunch option - bring your own lunch!**

KOS Officer/Board Slate for 2025 – 2026

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 – Glenn Caspers
Board Member – Jennifer Jones

Positions not needing a vote

Board Member – Lucas DeCicco
Board Member – Kevin Groeneweg
Past President – Kurtis Meier

Presented Paper Abstracts

Presenter denoted by *

Morning Session

Nesting Ecology and Movements of Prothonotary Warblers on Abandoned Mined Lands

Gabe McClain and Andrew George; Pittsburg State University, Biology Department*

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 woody encroachment, creation of reservoirs, and disturbance from past strip mining have resulted in extensive secondary nesting habitat. The goal of this ongoing study is to compare population demographics, dispersal, and migration patterns of Prothonotary Warblers between historically mined and unmined habitats in a region where they have not been previously studied. We placed 260 nest boxes on 6 mined and 6 unmined sites in SE Kansas and SW Missouri and monitored their occupancy and nest success across the 2025 breeding season. We also color banded adult birds on all 12 sites to monitor site fidelity between breeding seasons. In addition, we are collaborating with several local Audubon chapters to monitor nests outside of our study sites and attach light-level geolocators and Motus tags to a subset of Prothonotary Warblers. Here, we report findings from our first field season, including occupancy rates and initial tagging efforts. Results from our study will 1) help determine the conservation value of abandoned mined lands and other disturbed ecosystems for migratory songbirds, and 2) describe dispersal and migration of routes of western Prothonotary Warblers.

Reassessing Phenotypic Variation in the *Pipilo* Towhee Hybrid Zone of the Great Plains

Andrews, Ryan¹, DeCicco, Lucas H.¹, DeRaad, Devon A.², Klicka, Lukas B.³, Billerman, Shawn⁴, Rohwer, Vanya⁴, Moyle, Robert G.¹. [1] Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS [2] Department of Ecology and Evolutionary Biology, University of California Los Angeles, Los Angeles, CA [3] Department of Natural Science, Peru State College, Peru, Nebraska [4] Cornell Lab of Ornithology, Cornell University, Ithaca, NY*

Hybrid zones provide powerful natural settings for investigating evolutionary history, diversification, and patterns of trait variation. The hybrid zone between the Spotted Towhee (*Pipilo maculatus*) and the Eastern Towhee (*Pipilo erythrophthalmus*) in the Great Plains of North America offers an excellent system to study how hybridization influences genotype, phenotype, and their association. Here, we revisit a system first described in the 1950s, comparing the phenotypes of contemporary specimens to historical material using the same hybrid index scoring framework. This approach enables a direct comparison of phenotypic variation across a ~75-year timespan. Preliminary assessment suggests a broad turnover in phenotype across the transect and elucidates patterns of phenotypic change and provide context for understanding the temporal dynamics of this hybrid zone.

Avian Diversity in Mature Oak-Hickory and Pecan-Hackberry Habitats on the Fort Leavenworth Military Reservation

Sandra A. Guzman and William B. Stark; Ft. Hays State University*

Ten bird point count surveys were conducted in two forest types on the Fort Leavenworth Military Reservation in Leavenworth, Kansas between May 28 and July 14, 2025. The goal of the research was to record and compare species diversity between these habitats while additionally using automated recording devices (ARDs). Ten count sites were established in the Oak-Hickory upland and the Pecan-Hackberry floodplain. The upland sites consisted mainly of mature oak-hickory and invasive Honeysuckle. The floodplain sites consisted of an old growth pecan forest with an understory of stinging nettle. Detections were recorded as species presence at each site. Overall, 57 species were observed, with 43 observed in the upland and 47 in the floodplain. There were 1,944 overall detections: 922 in the upland and 1,022 in the floodplain. Of the 57 species observed, 5 were listed by Partners in Flight (PIF) as a Priority Species including the Prothonotary Warbler, Kentucky Warbler, and the Chimney Swift.

Seasonal Use of Abandoned Mined Lands by Non-Breeding Birds

**Heather K. Burrow and Andrew D. George, Pittsburg State University*

During winter and migration, birds rely on habitats that provide high-energy food and protection from predators and adverse weather. Abandoned mined lands (AMLs) are disturbed ecosystems that often include a mosaic of successional habitats, some of which may support diverse bird communities. We aim to establish a long-term banding study to investigate bird use of AMLs during the non-breeding season. We established 4 study sites in 2023 in a formerly surface-mined landscape in Crawford County, in southeast Kansas. We used constant-effort mist-netting to survey birds each month, including biweekly during fall and spring migration. Thus far, we have captured 57 species on AMLs, including 12 residents and 45 migrants, of which 24 do not breed in the study region. We did not detect differences in capture rates, species diversity, or body condition between mined and unmined lands. In December 2024, we began attaching Motus tags to Harris's Sparrow to study their regional movements and habitat use during winter. Our project emphasizes the potential conservation value of AMLs for birds during the non-breeding portions of their full annual cycle.

Afternoon Session

Molecular divergence between North American and Eurasian Gray-headed Chickadee (*Poecile cinctus*) populations based on genome-wide sequence data

Lucas H. DeCicco (), James A. Johnson, Robert G. Moyle, Travis L. Booms*

Many migratory species show a predominantly North American or Eurasian population with a smaller disjunct population in the other hemisphere. This is a particularly common pattern across the Bering Straits. However, there are few non-migratory species that show this pattern. The Gray-headed Chickadee (*Poecile cinctus*) is a notable exception, with a wide distribution across the Boreal Forests of Eurasia and a disjunct distribution in the northern Boreal Forests of the Alaska and western Canada. The conservation status of the North American population has

recently been a focus (e.g., there have been very few sightings in the past decade). However, the genetic distinctness of this isolated resident North American population has not previously been assessed. Here we present genome-wide DNA sequence data using a target-capture approach to assess the evolutionary history and population genetic structure of the species, with a focus on the North American population. This genomic perspective will hopefully be an important viewpoint to consider when determining the conservation status of this species in North America.

A Summary of the 2025 Spring KOS point-count surveys

John Schukman, Sara Shane, and Tom Shane.*

**14207 Robin Road, Leavenworth, KS 66048*

We conducted 55 point-count surveys in 7 southwestern Kansas counties in conjunction with the 2025 Spring KOS field trips. The point-count surveys were submitted to eBird. We found 60 species and 1017 individuals. Western Meadowlark (*Sturnella neglecta*) (91 individuals) occurred at the most stops, 40, whereas Cliff Swallow (*Petrochelidon pyrrhonota*) was the most abundant species, 306, found at just 7 stops. We focused on bridge locations to monitor swallow and phoebe occurrences. Barn Swallow (*Hirundo rustica*) was found at 9 locations, Say's Phoebe (*Sayornis saya*) at 7, and Eastern Phoebe (*S. phoebe*) at 5. We confirmed new county breeding records for Cliff Swallow in Grant and Gray, Say's Phoebe in Grant, and Eastern Phoebe in Hodgeman, Meade, Thomas, and Gove. Future surveys could be used to monitor change in numbers, especially if climate and vegetation factors affect shifts in occurrences.

Developing the Kansas Motus network to study grassland bird movements

*Andrew D George*¹, William E. Jensen², W. Alice Boyle³*

¹Pittsburg State University, ²Emporia State University, ³Kansas State University

The Motus Wildlife Tracking System is an international network of automated telemetry receiver stations that offers an effective method to study movements of small animals. Birds tagged with coded radio transmitters are detected as they pass within ~15 km of any station in the network, and all detections across the network are centrally stored and disseminated. The network has rapidly grown from covering regions of the northeastern USA and southeastern Canada to stations in most continents on Earth. Whereas many Motus users are interested in tracking migrant birds over continental scales, we aim to fill an urgent information gap regarding regional movements of many declining, grassland birds in Kansas. This guild of birds appears to exhibit unusual flexibility in where they breed from year to year, and even within years, but we have much yet to learn about these movements. Our goal is to place a receiver station in every county in Eastern Kansas. We are targeting core grasslands, such as the Flint Hills, in addition to surrounding fragmented grasslands to understand how landscape configuration influences movements. In collaboration with many entities, Kansas now has 25 operational receivers, with commitments for several more, and we have deployed more than 100 tags. We share here what new scientific insights this emerging network can provide and public education opportunities that will improve local knowledge of bird movements and our local grasslands.

Kansas Bird Check-lists; Status 2025

Chuck Otte, Milford, Kansas

Additions to the state and county check-lists continue. An update of what has happened over the past 25 years on both the state check-list as well the County Check-list Project will show some interesting trends.

A Changing World for Kansas Birds

Bob Gress, Wichita, Kansas

A discussion of the ongoing changes and challenges faced by birds in Kansas in general and specifically grassland species.

2024-2025 KOS Board

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***Thank you to Dr. Andrew George and Pittsburg State
University for hosting the 76th KOS Fall Annual Meeting!***