



The Horned Lark

Kansas Ornithological Society

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Current Alerts!

Thank You!

A big thank you to Dr. Medhavi Ambardar from the KOS Board and those attending the Fall Meeting at Ft. Hays State University, for the excellent work in organizing and hosting the meeting in October. It was great to be back to a “good old standard fall meeting”! It takes a fair amount of work to organize and plan a fall meeting so thank you Dr. Ambardar for helping get this all organized and arranging a very informative and educational banquet speaker.

An equally big thank you to everyone who presented papers on Saturday at the meeting. I always enjoy the paper presentations and learning what so many students, professors and KOS members are studying and researching. Let me add that many of those papers would make excellent articles for the KOS *Bulletin*. Please contact the *Bulletin* editor, Eugene Young (see page 2 for contact information) about what it would take to get your papers published!

KOS Board — Thank You and Welcome!

At the Annual Meeting (Fall Meeting) we said farewell to some board members and welcome to some others! Thank you Jenn Rader for two years of serving as our President. Jenn isn't totally off the hook yet as she will replace Cheryl Miller as Past President. Thank you Cheryl for your continued involvement in KOS. We also said farewell to Dave Rintoul, who had served the past two years as Vice President and to Robert Penner who served two years as an at large director for the Society.

We welcome to the Presidency Kurtis Meier who has served the past two years as a director at large. If you haven't had a chance to meet Kurt yet you are missing a gem. He brings a great love of the natural world and an infectious outlook on life to all those around him. Joining Kurt is Dr. Alice Boyle who was elected to Vice President. Two new at large directors were elected; Joseph Miller and Mark Nolen. We welcome all these new members to the KOS Board and look forward to their input and assistance in the coming year(s).

From the Keyboard

By the Editor

As I mentioned in my previous column, I will be stepping down as the Horned Lark editor at the end of this year, regardless of whether anyone has come forward to take over the reins. That does not mean that I will quit writing, however.

You may have noticed that there has not been a Birding Roundup for several issues. There were a couple of reasons for this. First of all, two knee surgeries in 2023 curtailed how much time I was comfortable spending at the computer keyboard. (The new knees are awesome and I'm about 98% returned to whatever my "normal" is!) Secondly, those Roundups were used to create the Southern Great Plains regional roundup for the North American Birds periodic publication. The other two regional editors (representing Nebraska and Oklahoma) both decided, as has happened in several of the regions, to cease pulling this information together. This was a multifaceted decision that included eBird reports and aging compilers!

I am not opposed at continuing to create the seasonal reports for the state of Kansas. I will be continuing to monitor records and reports for, hopefully, quite some time yet. BUT if the seasonal Roundup is not of use to the members, I see no need to continue to do it. Whomever the new Horned Lark editor is, I will be happy to provide this information. Let me know if you want to see it however!

One of the impacts of deteriorating knees, over the past four or five years, was a reduction in the amount of birding I did. Now that those days are behind me, I look forward to being out birding at my previous levels, or even more! With that in mind remember that the KOS Spring Field Trip is slated for the first weekend in May, May 3—5 to be exact. I'm working with Jeff Calhoun and the focus will be Riley, Pottawatomie and Geary Counties. If you've ever wanted to visit Walla Walla Road near Milford Lake, here's your chance. Between Tuttle Creek Lake on the Riley/Pottawatomie county line and Milford Lake on the Geary/Clay/Dickinson county lines, this spring's trip is a natural for those wanting to build a county list in any of those counties. Spring field trip registration information should be online by the last week of March.

I'd really like to encourage you to pay attention to young birders that you may encounter. Offer to purchase them a student KOS membership! I've been doing monthly (March through November) bird walks around Milford Lake for about 30 years and was wondering if it was time to let it go. Then last spring two young families started attending the walks. These young birders were very good. They were learning bird song and already knew many of the regular birds by sight. Their excitement and enthusiasm has reinvigorated me and gotten me excited about the start of bird walks again in the spring. They helped me reconnect with a younger Chuck and all of that youthful fun!

- Chuck



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https://ksbirds.org/kos/kos_officers.html

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(The following are draft minutes and will not be official until approved.)

**Kansas Ornithological Society (KOS)
Annual Membership Meeting
October 7, 2023
Ft. Hays State University**

The Annual Meeting of the Kansas Ornithological Society was held October 7, 2023. The meeting was held in Albertson Hall of Ft. Hays State University, Hays, Kansas. KOS President Jenn Rader called the meeting to order at 11:30 a.m.

The 2022 Annual Meeting minutes had been previously printed in the Horned Lark newsletter. Max Thompson moved to approve the minutes, Terry Mannell seconded the motion and it passed unanimously.

Treasurer Max Thompson reported that the Society was solvent and reported on totals that were currently in the endowment and the checking account. *(Those totals are available upon request to any current member.)* Since several expense items had been approved, including support to Pete Janzen and Bob Gress for their rewrite of *Guide to Kansas Birds and Birding Hotspots*, and support to Emporia State University for installation and maintenance of a MOTUS monitoring tower, funds had to be taken out of the endowment. Jenn accepted the report

Jenn then read the slate of officers and board members for the 2023-2024 year:

President – Kurtis Meier
Vice President – Alice Boyle
Corresponding Secretary – Chuck Otte
Membership Secretary – Jeff Calhoun
Treasurer – Max Thompson
Business Manager – Malcolm Gold
Editor, KOS *Bulletin* – Eugene Young
Editor, Horned Lark – Chuck Otte
Director – Joseph Miller
Director – Mark Nolen

Several officers gave brief informational reports, none of which required any action from the membership.

President Rader recessed the meeting, to be reconvened at the end of the Presented Paper Session later in the afternoon.

President Jenn Rader reconvened the meeting at 4:15 p.m.

Following some additional informational reports from officers and committees, President Rader called for any further officer/board nominations from the floor. Seeing none, she ceased nominations. Mike Rader moved to accept the proposed slate and cast a unanimous ballot. Bob Gress seconded the motions and it passed unanimously.

Secretary Otte announced that the following locations had been selected for future meetings, the 2025 locations should be considered tentative at this time:

Spring 2024 – Manhattan, May 3 – 5
Fall 2024 – University of Kansas, Lawrence (KOS 75th Anniversary)
Spring 2025 – Red Hills area (Barber and surrounding counties)
Fall 2025 – Pittsburg State University, Pittsburg

Meeting host Medhavi Ambardar announced plans for the evening banquet and program as well as meeting location for the Sunday morning field trips and location for the compilation at noon.

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With no further business to be discussed, **Chuck Otte moved to adjourn the meeting, Mike Rader seconded the motion and it passed unanimously. The meeting was adjourned at 4:29 p.m.**

The Banquet was held on Saturday evening, October 7th in the Ft. Hays State University Student Union. Following the meal an excellent program was given by Dr. Megan Judkins, Aviary Director, Grey Snow Eagle House, Perkins, Oklahoma, on "A Full Circle Approach to Eagle Conservation and How We All Have a Part."

Chuck Otte
Corresponding Secretary

**Kansas Ornithological Society (KOS)
Board Business Meeting
October 7, 2023
Ft. Hays State University**

The KOS Board Meeting was called to order at 12:20 by President Jenn Rader.

Attendance: Jenn Rader, Kurtis Meier, Eugene Young, Max Thompson, Terry Mannell, Malcom Gold, Andrew George, and Chuck Otte.

Gene Young moved to approve the minutes of the January 28, 2023 board meeting. Max seconded the motion and it passed unanimously.

Max asked if there were any questions on the report he gave in the previous meeting, and there were none. Dan Larson and Terry Mannell had served as the audit committee and had reported in an email to Jenn that everything was found to be in order.

There was extensive discussion of fundraising ideas, merchandise items for sale and field trips. No action was taken.

Future Meetings – Jeff Calhoun had indicated to Chuck a willingness to help host the 2024 Spring Field Trips in Manhattan. Max felt, and the board agreed, that with 2024 being the 75th Anniversary of KOS that we should meet in Lawrence at KU. He had spoken with some of the KU professors present at the meeting and they were willing to work with him on this. After further discussion the following list was developed with the 2025 locations considered tentative:

- Spring 2024 – Manhattan, May 3 – 5
- Fall 2024 – University of Kansas, Lawrence (KOS 75th Anniversary)
- Spring 2025 – Red Hills area (Barber and surrounding counties)
- Fall 2025 – Pittsburg State University, Pittsburg

Topics that came up under general discussion were research grants and student presented paper awards. The wording on the website had not been updated to reflect that research grants could now be requested by anyone, not just students. Chuck said he would work with John Schukman, chairman of that committee to develop new wording for the website. It was also felt that the student presented paper awards need to have more information and guidelines written down for future chairs of this event.

Seeing no further business needing the board's attention, Jenn thanked the board for their support over her two-year term and adjourned the meeting at 1:16 p.m.

Chuck Otte
Corresponding Secretary

**2023 KOS Fall Meeting Field Trips — Compiled Sightings
October 6 - 8, 2023
Ellis, Rooks, Russell, and Trego counties**

Canada Goose
Wood Duck
Blue-winged Teal
Northern Shoveler
Gadwall
American Wigeon
Mallard
Northern Pintail
Green-winged Teal
Redhead
Ring-necked Duck
Lesser Scaup
Surf Scoter
Ruddy Duck
Northern Bobwhite
Wild Turkey
Ring-necked Pheasant
Pied-billed Grebe
Western Grebe
Rock Pigeon
Eurasian Collared-Dove
Mourning Dove
Chimney Swift
American Coot
Sandhill Crane
American Avocet
Black-bellied Plover
Killdeer
Semipalmated Plover
Stilt Sandpiper
Sanderling
Baird's Sandpiper
Least Sandpiper
Pectoral Sandpiper
Western Sandpiper
Long-billed Dowitcher
Wilson's Snipe
Lesser Yellowlegs
Greater Yellowlegs
Sabine's Gull
Franklin's Gull
Ring-billed Gull
Common Loon
Double-crested Cormorant
American White Pelican
Great Blue Heron
Great Egret
Turkey Vulture
Osprey
Northern Harrier
Sharp-shinned Hawk

Cooper's Hawk
Bald Eagle
Broad-winged Hawk
Red-tailed Hawk
Ferruginous Hawk
Eastern Screech-Owl
Great Horned Owl
Belted Kingfisher
Red-headed Woodpecker
Red-bellied Woodpecker
Downy Woodpecker
Hairy Woodpecker
Northern Flicker
American Kestrel
Prairie Falcon
Eastern Phoebe
Loggerhead Shrike
Blue Jay
Black-billed Magpie
American Crow
Black-capped Chickadee
Horned Lark
Tree Swallow
Barn Swallow
Ruby-crowned Kinglet
Golden-crowned Kinglet
Cedar Waxwing
Red-breasted Nuthatch
White-breasted Nuthatch
Rock Wren
Carolina Wren
House Wren
Marsh Wren
European Starling
Eastern Bluebird
Mountain Bluebird
Townsend's Solitaire
American Robin
House Sparrow
American Pipit
House Finch
Pine Siskin
American Goldfinch
Chipping Sparrow
Clay-colored Sparrow
Field Sparrow
Dark-eyed Junco
White-crowned Sparrow
White-throated Sparrow
Vesper Sparrow
Savannah Sparrow

Song Sparrow
Lincoln's Sparrow
Swamp Sparrow
Spotted Towhee
Eastern Meadowlark
Western Meadowlark
Red-winged Blackbird
Brown-headed Cowbird
Common Grackle
Great-tailed Grackle
Northern Waterthrush
Orange-crowned Warbler
Nashville Warbler
Common Yellowthroat
Palm Warbler
Yellow-rumped Warbler
Northern Cardinal
Blue Grosbeak

120 species
Compiled by Chuck Otte and
Malcolm Gold

A breakdown of this list, by
county, can be found online at:
[https://ksbirds.org/
kos/2023_KOS_Fall.htm](https://ksbirds.org/kos/2023_KOS_Fall.htm)

Awards!

KOS has the opportunity, annually, to present two different awards. The Avian Conservationist award is given to an individual(s) for making significant contributions to bird conservation and/or education. The nominee does NOT have to be a KOS member, but the nominator does. The Boyd Award is presented for outstanding contributions and service to KOS. The nominator and recipient must both be KOS members. Details and nomination forms/information can be found online at https://ksbirds.org/kos/kos_projects.html. Remember, awards can only be presented if someone is nominated!

Kurt Grimm — KDWP, Slate Creek Wetlands Land Manager KOS Avian Conservationist of the Year Awardee

Nominated by Eugene Young and Max Thompson

Kurt Grimm is the land manager for Slate Creek Wetlands (SCW), Sumner County; Cowley State Lake and Kaw Wildlife Area, both in Cowley County. As part of his duties, he's also responsible for enforcing fish and wildlife laws. Since Kurt came to the area in 2004, especially at SCW, he has implemented a holistic conservation management plan that has focused on developing wetlands critical to migratory shorebirds along with many other wading birds and waterfowl; maintaining important vegetative communities; providing nesting and habitat for wetland, upland, and riparian avian species; and providing abundance of small mammal, and amphibian and reptile habitat. Kurt has attended numerous workshops and conferences on wetland management, especially moist soil habitats. He's been instrumental in obtaining funding to enhance existing wetlands, and develop new wetlands in what was formerly used as crop fields. Tree removal and burning has become a frequent tool to open up wetlands that were being infiltrated by native (woody) and invasive species of vegetation. He's controlled cattail populations, and is currently fighting constantly to keep up with a Phragmites infestation from nearby wetlands.

Prior to Kurt's arrival, SCW had three main complexes, a south and north complex, both privately owned by hunting clubs, and the mid-section operated by Kansas Department of Wildlife and Parks (KDWP.) The original 667 acres has increased to 947 acres with additional acquisition. From an avian perspective, SCW is known for extensive shorebird and waterfowl migration, with enough shorebirds to qualify as a site of regional importance for shorebird migration, with a minimal annual 20,000 shorebirds per year. In addition, herons and egrets, rails, and terns frequent the area. The passerine migration, especially sparrows and warblers are also common place in the area. The State land, was an ideal site for the passerines, and has become a frequent location to find Nelson's Sparrow, Le Conte's Sparrow, and both Marsh and Sedge Wrens. But, it had minimal habitat for the aquatic species, unless it was flooded. There was basically, one large pool/mudflat area where shorebirds and waterfowl could be found in large numbers. New wetland development prior to Kurt's arrival focused on deeper pool development without the ability to control water levels. Thus, the utilization by shorebirds was minimal, but waterfowl use increased. Upon Kurt's arrival, and with his implementation of a holistic approach, he's developed a wetland complex that now has the ability to control water levels, thus allowing drawdown for shorebird migration, extensive water for hunting seasons, and vast winter and breeding habitats...of course when mother-nature cooperates. The result, has been an increasing use of shorebirds, herons, and other wetland dependent species of birds, such that the greatest concentrations are now found as often within the State land as they are in the other larger pools associated with the private lands in the north and south complexes.

In addition, Kurt's management of the Kaw Wildlife Area (KWA, southeast of Arkansas City) and Cowley State Lake (CSL, east of Arkansas City) has been beneficial to those that enjoy fishing and hunting, but he's also provided habitat for numerous avian species and guilds. Use of burning, removal of invasive species, restricting certain areas to "walk-in" only, thus reducing habitat destruction by 4-wheelers and 4x4 trucks have been beneficial to the avian communities within. At the KWA, Yellow-crowned Night-herons and Wood Ducks have increased in nesting frequency; Bald Eagle nesting has been documented in numerous locations along the Arkansas River portions thereof; and Kentucky Warblers, Acadian Flycatchers, and Chuck-wills-widow can be found nesting in most years. Painted Buntings and Tree Swallow are common nesting species at CSL. Both areas are excellent locations to birdwatch during migration, as well as during the winter months, and the KWA is an important site during annual Ark City CBC.

This is an abbreviated version of the original nomination. The full nomination can be found online at: https://ksbirds.org/kos/Kurt_Grimm_ACY_2023.htm

Have you considered including KOS in your estate? Contact Treasurer
Max Thompson for details on how to make this happen.

Fall KOS meeting paper abstracts

Relationships between environmental stressors and Cliff Swallow (*Petrochelidon pyrrhonota*) feather coloration and colony size. Sonja Brandt* and Medhavi Ambardar Department of Biological Sciences, Fort Hays State University

Environmental stressors can strongly impact breeding birds. Cliff Swallows (*Petrochelidon pyrrhonota*) are aerial insectivores that experience mortality from car collisions because they often nest and hunt under bridges and road culverts. Individual traits that may convey social information, such as body condition, or feather coloration, may be associated with better coping around cars and other environmental stressors. Few studies have investigated relationships between coloration and other environmental stressors such as water loss due to drought near the colony and foraging areas. Our objective was to determine if road type in the colony area and water level were related to wing length, body condition, colony size, and feather coloration in Cliff Swallows. Our study took place in Barton and Ellis Counties, Kansas. This area is currently in a drought. We counted the number of active nests and captured adult Cliff Swallows with mist nets at colony sites. We measured wing chord length, mass, tarsus length, and tail length. We collected feather samples from the back, the rump, and two areas on the breast for coloration measurement using a spectrometer. We also assessed the water level in the colony area, and the whether the colony is located near a paved or gravel road. We found that water level influenced colony size, with significantly fewer active nests at colonies where the water level was visibly low. Since Cliff Swallows are common and widespread in North America, they could be helpful ecosystem indicators, especially if they are affected by drought or other environmental stressors.

Ecological insights into the behavior and diet of Burrowing Owls (*Athene cunicularia*) on the Sevilleta National Wildlife Refuge (NWR). James Loomis, Biology Department, Pittsburg State University; Michelle Dent, Biology Department, University of New Mexico

Understanding life history traits of predators is crucial to the conservation and management of ecosystems. This study focuses on the daily activities and diet composition of Burrowing Owls (*Athene cunic-*

ularia) on the Sevilleta National Wildlife Refuge in an ecotone between the Great Plains Grasslands and the Chihuahuan Desert. Between June 20 and July 14, 2023, eight motion activated trail cameras were installed directly behind nesting burrows and alternated weekly between photo sequences and 15-second videos. A total of 2519 photo sequences and 1005 videos were captured across 245 sampling days. We also collected and analyzed 20 owl pellets from near the monitored burrows. Pellets contained two orders of vertebrates and seven orders of arthropods with Orthoptera (grasshoppers) and Solifugae (sun scorpions) both comprised 26.7% by frequency followed by Coleoptera (beetles, 14%). Cameras only detected four orders of arthropod prey with Hymenoptera (ants, wasps, bees, 22.4%) as the most common and Spirobolida (millipedes, 6.6%) as the least common. We also summarized frequency of behaviors per 24-hr period. Camera data also indicated that the owls spent most of their time being attentive to the nest during midday, keeping an eye out for predators. Prey deliveries by parents to the den peaked during the morning and afternoon hours, likely to match the activity of their prey. Understanding the habitat use, diets, and behaviors of burrowing owls reveals their life history in this transitional southwestern ecosystem.

Use of abandoned mined lands as migratory stopover habitat: preliminary findings. Meg Norman and Andrew George, Biology Department, Pittsburg State University

Long distance migrants often rely on stopover habitats to restore their fat reserves and avoid predators during migration. Abandoned mined lands in southeast Kansas include a mosaic of successional habitats, some of which may support diverse bird communities. Here, our goal was to develop a long-term monitoring project to assess bird use of mined lands during migration. Thus far we have established 4 study sites for constant effort mist netting in Crawford County, where we intend to sample weekly during fall and spring migration. Over a 3-week period in fall 2023, we have captured 37 species, including 7 residents and 30 migrants, 15 of which do not breed in Kansas. As recaptures allow, we

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will examine body condition and length of stay on mined lands to values reported elsewhere. Our ongoing work on abandoned mined lands highlights the conservation value of these disturbed ecosystems.

How important are old bison wallows for shorebirds as they migrate through the Flint Hills?

Brandon C. Franta, Alexis F.L.A. Powell, and Shelly Wiggam. School of Science & Mathematics, Emporia State University, and The Nature Conservancy.

American Bison (*Bos bison*), which once numbered in the tens of millions in North America, were nearly exterminated in the 1800s, but millions of old bison wallows and other micro-depressions remain on the landscape. With rain, those features may hold water and serve as ephemeral wetlands that can support many organisms, including shorebirds (Charadriiformes). From 9 April – 12 May 2022 and 20 March – 17 May 2023, we measured the extent to which migrating shorebirds that stopover in native rangeland uplands use those ephemeral wetlands during spring migration. We surveyed 46 transects (with and without micro-depressions; 11,985 m total length) at Tallgrass Prairie National Preserve and three private properties in Chase and Greenwood counties, Kansas. For each transect, burn history was obtained from the land manager and vegetation height and density were measured. Each of the 322 detected micro-depressions was assigned to a wetland and emergent vegetation cover class in each survey. We found six shorebird species and seven other bird species present within micro-depressions. Several species appeared to be attracted to recently burned grassland rather than to micro-depressions per se. We will assess the importance of these and other variables to identify habitat components that attract shorebirds in upland grasslands.

Testing the urban dulling hypothesis in an iridescent passerine bird. Joanna Corimanya^{1,2}, Rachel Kaplan², Denyelle Kilgour², Courtney Linkous², Michelle Ross², Sarah Guindre-Parker²
¹Department of Ecology and Evolutionary Biology, The University of Kansas ²Department of Ecology, Evolutionary, and Organismal Biology, Kennesaw State University.

Novel urban ecosystems lead to phenotypic divergence between urban and rural populations. Urbanization's effect on songbirds is well-documented, yet divergent signaling behaviors remain poorly understood. Urban color homogenization is relatively

established in carotenoid-colored species. However, iridescent plumage is generally understudied, and how environmental changes shape iridescent plumage remains unclear. This study seeks to identify and explain urbanization-induced coloration differences in an iridescent songbird for the first time.

We investigated the role of urbanization, body condition, and preening effort in shaping iridescence. We compared breeding European Starlings (*Sturnus vulgaris*) captured across an urban-to-rural gradient to test the urban dulling hypothesis. Plumage coloration was estimated by extracting mean brightness, full-width half maximum, ultraviolet chroma, and peak wavelength from reflectance spectrophotometry values for free-living birds' throat, belly, and back feathers. Unlike pigment-derived colorful species, European Starlings did not differ in coloration across a gradient of urbanization. We did find that body condition and preening effort both have a negative relationship with back plumage saturation, though all other plumage coloration variables were unrelated to preening or body condition. Since the throat plumage—the most important for courtship displays—was unrelated to urbanization, our results do not support the idea that plumage dulling occurs in urban starlings to shape mate choice. Instead, iridescence in starlings may be beneficial as this plumage type could be more resilient to the various overly abundant plumage degrading mechanisms common to cities. Future research should mechanistically explore how iridescent plumage resists urban degradation.

Assessing and mapping breeding bird distributions within Ioway Tribal National Park. Brandon C. Franta, Alexis F.L.A. Powell, and Brett Ramey. School of Science & Mathematics, Emporia State University

Ioway Tribal National Park (ITNP) is located in what is now commonly called Nebraska and Kansas (in their southeastern and northeastern corners, respectively). The land consists of rolling bluffs, with areas of upland and lowland prairie together with oak-hickory forest tracts, along the Missouri River valley. Conservation projects are being considered; therefore, baseline data are needed to help anticipate effects of potential stewardship alternatives. From 27 May to 27 July, in 2022 and 2023, we conducted surveys of breeding birds and woody vegetation to describe their compositions and distributions in ITNP. Spot-mapping along 23 transects was used to record the geographic locations of birds, which were detected via auditory or visual cues at unlimited distance. Trees and shrubs were identified to

species, counted, and their diameters at breast height (DBH) were measured. In total, 60 bird and 36 woody plant species were identified, including ten bird Species of Greatest Conservation Need in Nebraska as well as six in Kansas. Thus far, we have mapped bird distributions and have been measuring strengths of associations between bird presence and woody vegetation parameters such as species diversity, species abundance, and tree density, in addition to elevation, slope, aspect, land use and land cover data, and distances to water and edge.

Hybridization of Spotted and Eastern towhees along the Niobrara River, northern Nebraska.

Lucas H. DeCicco, Lukas B. Klicka, Devon A. DeRaad, Robert G. Moyle Biodiversity Institute and Department of Ecology and Evolutionary Biology, University of Kansas

The central Great Plains of North America are well-known for contact between western and eastern species. In this region, ribbons of riparian forest connect the western and eastern forested regions of North America that were historically isolated by the central prairies. These riparian connections provide ideal situations to study the dynamics of hybridization in species associated with eastern and western forested regions. Eastern and Spotted towhees (*Pipilo erythrophthalmus* and *P. maculatus* respectively) are representative of an east-west species pair that comes into breeding contact along a number of these riparian corridors in the central Great Plains. Over the past two summers, we have studied the contact between these two species along the Missouri and Niobrara rivers in northern Nebraska. To date, we have sampled eight sites along this riparian corridor that span sites with pure Eastern Towhees to those with pure Spotted Towhees and many sites in between. Here we present our study design, a summary of data collected, and preliminary genomic results. Based on our genetic data, we found extensive hybridization between Eastern and Spotted towhees along the Niobrara and Missouri rivers across an area of ca. 400 km. Despite consistent clinal genomic admixture within this hybrid zone, plumage characteristics remained highly variable, and plumage aspect was often miss-matched with genomic background. Much more research is needed, but preliminary information suggest that hybridization is extensive and that there appear to be little to no barriers to reproduction between these two species when they occur in secondary contact.

Quantifying range expansion in birds across the Great Plains. Jacob C. Cooper^{1,2,3}, A. Townsend Peterson² ¹Biology Department, University of Nebraska at Kearney, 1401 11th Ave, Kearney, NE 68849 ²Biodiversity Institute, University of Kansas, 1345 Jayhawk Boulevard, Lawrence, KS 66045 ³Field Museum Negaunee Integrative Research Center, Division of Birds, 1400 S DuSable Lake Shore Drive, Chicago, IL 60605

Range expansion in North American birds across the Great Plains has been noted in the literature since the time of colonization, as the eradication of America's megafauna and ensuing land use changes have altered the landscape of the plains to be more amenable to eastern hardwood bird species. Many of these eastern species have progressed steadily westward since the times of our earliest documented collections and surveys, and some have even progressed northwards as well, assumedly benefitting both from increasing global temperatures and colonization land use change. To study the patterns and processes behind these range shifts, we selected ten species of bird native to eastern North America that have been noted as moving westwards across the plains. We use Breeding Bird Survey (BBS), Global Biodiversity Information Facility (GBIF), and eBird data to look at interannual variation in species' distributions, and to create seasonal models for suitability for species in the region while assessing which environmental factors limit distributions. We demonstrate that these methods can effectively identify edge regions in species ranges and help identify environmental correlates for limiting species' ranges. Furthermore, we highlight the difficulty in assessing true distribution shifts given the dynamic nature of species' distributions and given unequal regional effort in bird survey methodologies.

Distribution of Rufous-crowned Sparrow (*Aimophila ruficeps*) along the Phroso Breeding Bird Survey Route, Major County, Oklahoma: Response to land cover change as a result of wildfire. Zach Poland and Pete Janzen*

The Phroso Breeding Bird Survey (BBS) Route has been conducted in western Major County, Oklahoma since 1991. Prior to 2012, Rufous-crowned Sparrow (*Aimophila ruficeps*) had not been recorded on the route. Rufous-crowned Sparrows have been observed in two parts of the Phroso BBS Route near annually since 2012. The establishment

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The establishment of Rufous-crowned Sparrows on the route is coincidental with a large wildfire, the Chester Fire, which burned much of the area along the Phroso BBS Route. After thinning of the vegetation, particularly Eastern Red Cedar (*Juniperus virginiana*) by fire, Rufous-crowned Sparrow distribution is heavily tied to surficial geology (Marlow Formation and Blaine Formation outcrops). Although “fire-following” behavior has been documented in Rufous-crowned Sparrows, this appears to be the best documented example for the interior ssp. (*A. r. eremoeca*).

Nest-box populations of American Kestrels: model raptor systems for undergraduate teaching and research at small colleges. Scott A. Kimball*, Department of Biology and Chemistry, Baker University

Raptor research at small undergraduate teaching colleges suffers from a number of challenges; chief among them are the limited opportunities to execute raptor research in the short time frames undergraduate students require in field laboratory exercises or research projects. American Kestrels (*Falco sparverius*) offer a unique opportunity to meet these challenges because unlike many raptor species, they: a) readily utilize nest boxes, b) tolerate limited human activity, c) occur in relatively high densities throughout North America, and d) have a relatively short nesting cycle that occurs almost completely within an academic semester. These characteristics help provide a reliable source of data for student and faculty researchers, alike. In eastern Kansas, where American Kestrels are found throughout the year, I installed 24 nest boxes beginning in 2016 that now average over 40% annual occupancy. Here I describe how the project has allowed for collaboration among a small college, local governments, the energy industry, and local citizens, demonstrating to undergraduate students the logistics and benefits of such collaborations. Furthermore, I describe how the project has allowed students to pose a variety of hypothesis-driven research questions that apply broadly to animal biology and help to understand details about kestrel ecology. Finally, these research projects and learning experiences have provided opportunities for undergraduate students of ecology to present their research at scientific meetings and to the general public, leading to a full scientific experience in raptor biology for students at a small college, a setting where research is not always mandated in undergraduate education.

Regional-scale collapse of Greater Prairie-chicken populations. A. Townsend Peterson, Brian K. Obermeyer, Mark B. Robbins

The Greater Prairie-Chicken (*Tympanuchus cupido*) is an iconic species of grassland habitats (predominantly tallgrass prairie) across central and east-central North America that has declined dramatically across its range over the past century. To assess its conservation status in an area once considered a stronghold of the species, we revisited and resurveyed a 33,225 ha area of tallgrass prairie in central Kansas that was the subject of detailed study in 1997, and at that time supported a metapopulation consisting of 31 leks. This quarter-century assessment on population status of the species revealed a 70% reduction of leks across the study area in 2022 and a total decrease of 84% by 2023. Of particular concern was a dramatic reduction of leks between the 2022 and 2023 breeding seasons. We analyze and discuss landscape features that are associated with these population losses, including woody plant encroachment and large-scale, frequent spring burning of grasslands, and reflect on the prospects for the future of this species.

A preliminary evaluation of bird-window collisions on a college campus. Medhavi Ambarar, Department of Biological Sciences, Fort Hays State University

Human activity can have strong and long-lasting effects on birds. One way in which this can happen is through the creation of ecological traps. For example, college campuses may provide desirable habitat for birds, but certain buildings may cause mortality through window strikes. At Fort Hays State University (FHSU), two new buildings with extensive glass features were erected within the last four years. The primary goal of this ongoing study is to determine if bird window strikes occur at FHSU and if so, at which building(s). A secondary goal of this study was to pilot survey methods that could include ornithology students in an authentic research experience. Structured surveys took place during two ornithology lab periods in April 2022 and two lab periods in April 2023. Some individuals took part in additional opportunistic surveys throughout the academic year. We also recorded living birds seen on campus during dedicated birding outings and during window kill surveys. No bird carcasses were found during structured surveys. Six individual carcasses of five different species were salvaged on campus during opportunistic surveys.

Four of these carcasses were determined to have died from window collisions, and three of these carcasses were found near one of the new glass buildings. We plan to add more frequent structured surveys in the fall and spring to determine a robust baseline of bird mortality and its potential causes with the goal of presenting FHSU leadership with mitigation recommendations. The potential benefits of student involvement will also be discussed.

The Bunker Resurvey Project: First results and an invitation. A. Townsend Peterson, , Jacob Cooper, Lucas DeCicco, Mark B. Robbins, Biodiversity Institute, University of Kansas.

The state of Kansas has a rich legacy of vertebrate biodiversity surveys, particularly early in the twentieth century, with the work of Lewis Lindsay Dyche and Charles Dean Bunker, both based at the University of Kansas Natural History Museum (KUNHM). Their specimens are carefully curated at the KUNHM to this day, and serve as a crucial reference to what Kansas biotas were like a century or more ago. The current staff and associates of the KUNHM are now replicating those early studies, as part of the Bunker Resurvey Project, developing repeat surveys for 25 sites across the state. The work covers birds, mammals, reptiles, and amphibians. In this talk, we present preliminary results regarding birds at four sites, showing a variety of avifaunal changes that has manifested at those sites, which reflect macro-scale range changes in some species (e.g., Great-tailed Grackle *Quiscalus mexicanus*), landscape-scale range expansions related to tracking forest habitat expansion in the Great Plains (e.g., Barred Owl *Strix varia*, Pileated Woodpecker *Dryocopus pileatus*), and other changes over the past century. We invite others in the Kansas Ornithological Society to contribute to the resurvey efforts at a suite of sites across the state for which public access is permitted by landowners.

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KOS Top 10 Birds of the Year October 2022—October 2023

10. Black-throated Sparrows (*Amphispiza bilineata*): immature seen near a small playa in Gove County on 23 August 2023, in Morton County 4 September 2023, and another in Garden City, Finney County, 14 September 2023.
9. Short-billed Gull (*Larus brachyrhynchus*), KBRC #2022-29, first cycle, 3 December 2022, at John Redmond Reservoir, Coffey Fifteenth state record.
8. Limpkin (*Aramus guaranauna*), KBRC #2022-32, adult, 24 October – 15 November 2022, at Heritage Lake, Heritage Park, Olathe, Johnson County. Tenth state record. There were additional Limpkin sightings (10+) in the state through early October 2023.
7. Anna’s Hummingbird (*Calypte anna*), KBRC #2022-25, immature male, 18 – 22 October 2022, in Garden City, Finney County. Thirteenth state record.
6. Painted Redstart (*Myioborus pictus*), Elkhart Shelterbelt, Morton County, 20 April 2023, Eighth state record.
5. Bronzed Cowbird (*Molothrus aeneus*), Arkalon Park, Seward County, 8 June 2023, Fourth state record.
4. Scott’s Oriole (*Icterus parisorum*), KBRC #2022-33, immature male, 5 December 2022 – April 8, 2023, at a residence in Overland Park, Johnson County. Third state record.
3. American Flamingo (*Phoenicopterus ruber*), Chase County State Fishing Lake, Chase County, 27 September to 9 October, 2023. Third state record
2. Brambling (*Fringilla montifringilla*), Abilene backyard, Dickinson County, 18-23 March 2023. Second state record.
1. Mexican Duck (*Anas diazi*), (if accepted by KBRC it will be the first state record), Syracuse River Access & Ponds, Hamilton County, 11 May 2023.

For additional detail and list of honorable mentions go to: https://ksbirds.org/kos/Top_10_2023.htm

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Spring Meeting to be hosted in Manhattan!

The KOS 2024 Spring Meeting is heading to Manhattan! The last time Manhattan hosted a spring meeting was in 1997 when it was held in conjunction with the Wilson Ornithological Society's annual meeting. Details are still being worked out but it will be May 3—5. Field trips will be in Riley, Pottawatomie and Geary Counties. With Tuttle Creek Reservoir and Milford Reservoir in this zone there are lots of opportunities for lots of field trip locations.

The 2024 Fall KOS Meeting will be the 75th anniversary of the founding of the Kansas Ornithological Society. As such we plan to take it back to where it started; Lawrence. Lots of details to still be worked out and the exact date will depend on football schedules, of course! But start planning now to attend this wonderful celebration!

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KOS is a non-profit organization committed to providing an environment that is inclusive and free from discrimination in our membership community and associated KOS activities because of race, religion, creed, national origin, ancestry, disability, gender, sexual orientation or age.