



The Horned Lark

Kansas Ornithological Society

December, 2015

Vol. 42, No. 4

From the President's Pen

By Matt Gearheart

Greetings KOS friends,

First off, I'd like to thank all those whom worked so hard to put together such a great Fall Meeting in Emporia! This includes many current board members, especially Rob Penner, and many local committee individuals, especially Bill Jensen. There were more student and professor presentations than I can remember, and all of the highest caliber. Kansas truly has been graced with some amazingly talented individuals! Noppadol Paothang dazzled us with his amazing grouse photography and stories. In case you missed it, here is a link to some of his work:

<http://www.nopnatureimages.com/>

On a more philosophical note: as the world becomes more technologically advanced, so does the birding world. This can be quite exciting as the information exchange of bird sightings and photos are now more instantaneously available. Apps can bring all birding field guides and sounds to the palm of your hand. Unintentionally, this can potentially have a negative effect on organizations such as KOS, where particularly younger member prospects may be less likely to join. The

instant gratification of the cyber world can seem to have all one may need. I would contend that this makes KOS more important than ever.

Since 1949, KOS has been connecting birders to the birds through its devotion to the study, conservation and distribution of Kansas birds. This is achieved through our Spring and Fall meetings, periodicals of *The Horned Lark* and *The Bulletin*, and sharing our knowledge of the state's avifauna. Largely this information is shared through the Kansas Bird Discussion List, KSBIRD-L and the KOS Facebook page. Your membership dues help support these birding tools and encourage others to learn all about Kansas Birds.

So while you are renewing your membership for 2016, I encourage you to give a gift membership to a friend or family member.

Have a wonderful Holiday Season and a Birdy New Year!

Matt

From the Keyboard

By the Editor

I need to start by echoing Matt's kudos for the Fall Meeting. Great location, incredible paper presentations, wonderful facilities, a beautiful Sunday morning for field trips and the fellowship of good birding friends. Who can ask for a better way to spend an October weekend? My thanks also to Bill, Rob and everyone else who made the weekend so good.

There is a LOT in this issue of the Horned Lark. My younger friends will tell me that there is entirely too much text, not enough white space, and no photos. Well, that's because we have a lot of things we need to include in this issue, and adding four or eight more pages doesn't come cheap. I do feel bad about having to squeeze Part II of Jeff's great article on birding in southwest Kansas down to two pages. Jeff had a lot of great photos in the original version of his article. To atone for my editing, I have created an online version of Jeff's article complete with all of his photos. Follow the URL on page 19 to access the complete version on line, including ALL the photos!

Matt mentioned renewing your membership and adding one for a non-KOS member birding friend. The membership form and information is on the last page of this newsletter. However, we now have an on-line membership payment option for those who prefer to go that route. You can go to ksbirds.org and click on the link just to the right of the Horned Lark graphic, or just go to http://ksbirds.org/kos/kos_member.html.

Matt really hit a point that I've watched for a long time. Many organizations have stagnant or falling memberships. Thirty years ago you joined an organization like KOS because it was the only regular place you could obtain information about birdwatching or whatever organization you joined. But with the internet and world wide web based world, there is a plethora of web sites and information at your fingertips. Some of it is even valid and useful information. But those websites come at a cost. The KSBIRDS.ORG website is paid for by your KOS. Your dues support that website and all the information that can be found there.

I helped start the KSBIRD-L birding listserv back in 1996. In the nearly 20 years of its existence it has grown to over 650 subscribers. A couple of years ago a Kansas Birding Facebook page was started. It now has over 1,100 members. Patty Marlett announced at the Fall Meeting that KOS membership is around 320. Granted, both the KSBIRD-L listserv and Facebook page exist without any support from KOS. But if there are that many people that are interested in birds in Kansas, why aren't they joining KOS? Maybe all of KOS members need to just start talking about joining a lot more regularly!

I'm about out of room but be sure to check page 7 for details on the two latest additions to the Kansas checklist and page 17 for a brief mention of Breeding Bird Atlases. Until next time - have a great winter birding season!

- **Chuck**



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2015 Ivan L. Boyd Recognition Award

Dan Kilby

Nominated by Pete Janzen and Tom Shane, presented by Pete Janzen.

The nomination guidelines for the KOS Dr. Ivan L. Boyd award include 30 to 40 years of membership in the Kansas Ornithological Society, prior service on the KOS board, an enumeration of past publications in the KOS Bulletin, a listing of the nominee's graduate ornithology students, and significant field ornithology work.

Tom Shane and I would like to honor a man who has contributed to Kansas Ornithology in an entirely different but equally significant manner. Dan Kilby has been a member of KOS for 61 years, joining in 1955, the same year that Max Thompson joined KOS. With his exceptional artwork, he has contributed to the advancement and enjoyment of Kansas ornithology in ways that no one else has done since the founding of KOS in 1949.

Dan has created his exceptional bird artwork for well over 50 years. He began drawing and painting birds as an architecture undergraduate at Cornell University in the 1940's, where he became acquainted with Dr. Arthur A. Allen and his wife Elsa. Cornell had previously been home to two internationally known bird artists earlier in the 20th Century: Louis Agassiz Fuertes and George Miksch Sutton. Both of these artists strongly influenced the unique style of Dan's drawings and pastels. Cornell in those years was a great environment for learning to draw and paint birds. Dan's work consistently reflects the influences of both Fuertes and Sutton.

Many of us are fortunate to have some of Dan's prints and originals in our homes and offices. His line drawings and paintings have graced the pages and covers of several American Birding Association publications, including *Birding* magazine and the *Winging It* newsletter, and perhaps most notably a number of the illustrations in the *Birder's Guide to Planning North American Trips*. He also provided the artwork for the 2003 ABA

convention T-shirt, a stunning rendering of a Western Tanager. He has donated line drawings for the pocket nature guide series put out by The Great Plains Nature Center. He created over half of the line drawings for the *Kansas Breeding Bird Atlas* book by Busby and Zimmerman. Dan has also created and donated images for several KOS T-shirts including: the Wilson's Phalarope, Prairie Merlin, Sparrows of the Prairie, and most recently the Black-headed Grosbeak. The sales of these shirts have generated several thousand dollars for KOS over the years.

Dan was one of the founders and charter members of the Wichita Audubon Society in 1954. He was honored with that organization's Meritorious Service Award in 2000. His contributions to WAS financially and as a volunteer are too numerous to detail here but perhaps most notably included being the principal architect of the Chaplain Nature Center Visitor's Center. Kenn Kaufman is one of the most prominent birders and birding authors in the world today. Dan can rightly claim to be one of Kenn's earliest mentors. When Kenn was too young to drive, Dan was one of several Wichita birders who gave Kenn rides so he could go birding at Cheyenne Bottoms and other locations.

On a more personal note, I have always had a great appreciation for Dan's love of birds and birding. His genuine enthusiasm for birding has few equals. His exuberant comments about whatever bird he happens to be looking at are quite infectious. Dan is now in his late 80's and in the last two years joined Wichita Audubon on long distance trips to Cape Hatteras, North Carolina and Southern California, including two all-day offshore pelagic trips. He continues to be an active member of Wichita Audubon and rarely misses a meeting or a field trip.

We would like to thank Dan for sharing his special talent with KOS members, and all Kansans who love birds, over the last 61 years by awarding him with the Ivan Boyd award for 2015.

2015 Avian Conservationist Award

Ed Martinez

Nominated and presented by Eugene Young.

Ed Martinez (a member of KOS since 1970) banded shorebirds at Cheyenne Bottoms (CB) back in the 1960s and continued through the 1990s, mostly by himself. The result of his banding and observations/surveys (1967-1994), led to CB being included in the Western Hemisphere Shorebird Reserve Network as a site of Hemispheric and International Importance. All of his work was as a volunteer.

He banded around 85,000 shorebirds and conducted almost 400 surveys at CBWMA. “According to Brian Harrington, shorebird scientist with Manomet Center for Conservation Sciences, no individual has banded as many shorebirds in the U.S. and conducted more shorebird surveys for the International Shorebird Surveys than Ed” (<http://www.getruralkansas.org/mobile/explorations.php?id=396&tid=50>). His legendary banding studies introduced us into understanding the migration of shorebirds, the long-distances traveled, even elliptical migration.

Major contributions (see below), while few, had a profound impact on understanding shorebird migration and set the foundation for shorebird monitoring and hypothesis development within Kansas and the interior of North America. You can't hardly find a shorebird migration manuscript/thesis/dissertation that doesn't have one of his publications cited. Thompson et al. (2011) in their Birds of Kansas were able to depict the migration routes for the majority of shorebird species that travel through Kansas as a result of Ed's work (see their banding maps).

There is no more significant contribution to our understanding of shorebird migration, which triggered our comprehending of shorebird ecology and the need for conservation within Kansas, or the impact that wetlands, especially CB, has on shorebirds from a regional and international perspective, than the lifetime volunteer work of Mr. Ed Martinez. For his efforts, it is with great pleasure that I recommend him for the KOS Avian Conservation of the Year award.

Martinez References

Martinez, E.F. 1974. Recovery of a Semipalmated Sandpiper at Pruhoe Bay, Alaska. *Bird-Banding* 45: 364:365.

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Senner, S.E. and E.F. Martinez. 1982. A Review of Western Sandpiper Migration in Interior North America. *Southwestern Naturalist* 27(2):149-159.

Harrington, B. A., F. J. Leeuwenberg, S. L. Resende, R. McNeil, B. T. Thomas, J. S. Grear, and E. F. Martinez. 1991. Migration and mass change of White-rumped Sandpipers in North and South America. *Wilson Bulletin* 103:621-636.

KOS Balance Sheet, October 3, 2015

Investment Fund	\$173,213
Checking	\$6,966
Total	\$180,179
Liabilities & Fund Balances	
General Fund	\$6,966
Endowment	\$83,615
Life Membership Account	\$37,877
Book Royalty Fund	\$36,099
Dingus Nature Area	\$9,018
Student Research Fund	\$6,604
Total	\$180,179

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Kansas Birding Roundup, Summer 2015 (Jun – Aug) Chuck Otte, compiler

The summer of 2015 showed, once again, that birds don't necessarily follow calendar dates during migration, but follow weather patterns and climatic conditions. Much of the state experienced a wet summer or at least a wet start of the summer. This contributed to a lot more surface water than normal leading to many new county records for shorebirds, which lingered later than normal in the state. Or perhaps due to good water conditions, non-breeding birds simply stayed in the state all summer. The overlap between late north bound migrants and early south bound migrants can often be hard to differentiate during shorebird migration, and this year was perhaps more confusing than normal as a result of lingering individuals.

Black-bellied Whistling-Ducks seem to be showing up more often in recent years. A pair was photographed in a drainage ditch southeast of the town of Sedgwick in late June. After a century of virtually no records of Swallow-tailed Kites in Kansas, we have had several records in the past ten years. Observers this season saw two Swallow-tailed Kites in the state. One was found in poor health in the town of Osborne. It was taken to a wildlife rehab facility but it unfortunately died. A second bird was seen in Barber County and lingered into September allowing for many birders to see this former Kansas breeding species. These two records were within a few days of each other and literally, one was straight north of the other. The bird that died was seen first eliminating the possibility of two sightings of the same bird, but raising the question of whether they arrived together and one merely continued further north. A report of Roseate Spoonbill at Quivira was intriguing and convincing but unfortunately, not re-found. This continuing trend of "southern" species causes many to consider climate change as a contributing factor. Whether it is climate change or merely increases in populations and post breeding dispersal, birders need to be alert for these traditionally more southern species.

We have also noticed changes in other species. For the past several years we have seen several reports of loons during the summer months. If the previously mentioned changes are the result of global warming, how do we explain the presence of a northern species? Reports from various locations in June, July and August of Common Loons have ceased to be unexpected. Gulls have historically been scarce in June and early July, but now we expect them as well. Is this a result of better water conditions, climate change or increased breeding in nearby regions? Or, is it a result of better lines of communication from birders, therefore more records becoming known?

Finally, the Black-chinned Hummingbird, traditionally a western US species, appear to be expanding east, as hummingbird expert Sheri Williamson explained to me in a recent e-mail. While immatures and females of this species can be a challenge to separate from Ruby-throated Hummingbirds, it can be done (and several photos were confirmed as Black-chinned Hummingbirds by Ms. Williamson.) Reports from Ford and Finney counties this season were noteworthy but not unexpected. The report from Reno County was more easterly and a new county record. So keep those feeders filled and start studying tail patterns of hummingbirds!

Thank you to everyone who reports and contributes sightings for this report. Please forward any noteworthy sightings to me at otte2@cox.net or mailed to 613 Tamerisk Dr., Junction City, KS 66441.

Species	Number and Location	County	Date	Observer(s)
Black-bellied Whistling-Duck	2 in drainage ditch SE of Sedgwick	Harvey	6/27	RM
Greater White-fronted Goose	1 at CBWMA	Barton	7/31	MR
	Seen regularly through August.			
Cackling Goose	1 summering at Wyandotte Fishing Lake	Wyandotte	7/04	OK
	Unknown whether this bird was injured.			
Mottled Duck	1 female on Wildlife Drive, BSM-QNWR	Stafford	7/02	MR
Cinnamon Teal	1 in eclipse plumage, BSM-QNWR	Stafford	8/23	JL
Ring-necked Duck	Uncommon summer record, MDC area	Linn	8/10	NS
Ring-necked Duck	Uncommon summer record, BSM-QNWR	Stafford	8/13	JL
Common Loon	1 at Clinton Lake	Jefferson	6/01	MMH
Common Loon	1 at MDC Unit G	Linn	7/20	MG, ML
	Still present, 8/09			

Species	Number and Location	County	Date	Observer(s)
Common Loon	1 in basic plumage, Milford Lake Dam	Geary	7/25	CO
Neotropical Cormorant	At least one nest at CBWMA	Barton	7/04	JL
Great Egret	<u>180+</u> at BSM-QNWR	Stafford	8/27	MR
Snowy Egret	<u>250</u> at BSM-QNWR	Stafford	8/27	MR
Roseate Spoonbill	Out of state birders reported one QNWR	Stafford	7/14	BJ-fide
	While not able to be re-found, description, timing and location seemed likely.			
Osprey	1 at Bone Creek Lake	Crawford	7/21	ABu
Swallow-tailed Kite	1 in Osborne, died at rehab facility	Osborne	8/24	KDWPT
Swallow-tailed Kite	1 followed down roads near Sun City	Barber	8/28	JL
	Present into early September, seen by mob and photographed.			
Swainson's Hawk	1 easterly near Kansas City	Wyandotte	7/14	NA
Swainson's Hawk	Another easterly report from KC area	Johnson	7/30	TA
<u>Sora</u>	Calling and flying at Playa near Montezuma	Gray	7/20	JC
American Avocet	<u>1,500</u> at BSM-QNWR	Stafford	8/27	MR
American Golden-Plover	1 at BSM-QNWR	Stafford	6/20	MR
American Golden-Plover	1 at BSM-QNWR, possibly same bird	Stafford	7/22	JH
Snowy Plover	30 at west end of Kirwin Reservoir	Phillips	6/08	CD
Piping Plover	7 at west end of Kirwin Reservoir	Phillips	6/08	CD
Piping Plover	1 juvenile, Stockdale Park, Tuttle Creek	Riley	8/08	AB
Mountain Plover	1 on Grigston BBS route	Finney	6/08	JC
Willet	a late at Clinton State Park	Douglas	6/26	MLo
Whimbrel	1 at BSM-QNWR	Stafford	6/02	BrM
	Continuing on 6/20, quite late			
Hudsonian Godwit	1, uncommon interior fall migrant, CBWMA	Barton	8/23	BS
Marbled Godwit	1 at Clinton Lake. Summering or migrant?	Douglas	7/18	DL
Ruddy Turnstone	1 in breeding plumage at BSM-QNWR	Stafford	6/04	GP
Red Knot	1 basic plumage, at BSM-QNWR	Stafford	8/27	MR
Sanderling	3 at west end of Kirwin Reservoir	Phillips	6/08	CD
White-rumped Sandpiper	At least 12 still at QNWR	Stafford	6/20	MR
	25 present on 7/2 – very late for this species.			
Buff-breasted Sandpiper	1 westerly at Garden City playas	Finney	7/15	JC
Semipalmated Sandpiper	<u>1,000</u> at BSM-QNWR, large number late	Stafford	6/06	CD
Red-necked Phalarope	1 somewhat early migrant at QNWR	Stafford	8/13	JL
Red-necked Phalarope	1 at Baker Wetlands	Douglas	8/15	DL
<u>Red-necked Phalarope</u>	1 at Kyle Marsh	Jefferson	8/29	JZ, LVZ
Pomarine Jaeger	1 adult in alternate plumage, CBWMA	Barton	8/19	JCo
Bonaparte's Gull	1 slightly early at Fancy Creek State Park	Riley	8/15	ER
California Gull	1 imm at CBWMA, unusual summer record	Stafford	7/24	MR
California Gull	2 adults, 1 imm at CBWMA	Barton	8/13	JL
	At least 1 still present on 8/28			
Herring Gull	1 at Milford Lake, Smith Bottoms	Clay	7/22	ER
Lesser Black-backed Gull	1 2 nd cycle bird at CBWMA	Barton	8/22	MG
	Still present on 8/28			
Least Tern	1 on Pawnee River at Byler Road	Finney	8/07	JC
Caspian Tern	4 at Lake Quivira, late (or early) migrants	Johnson	6/23	MC
Greater Roadrunner	Adults feeding young south of Larned	Pawnee	7/06	DKz
<u>Greater Roadrunner</u>	1 photographed	Scott	7/23	SSh
Burrowing Owl	<u>20</u> feeding along roadside near CRP	Ford	8/23	JC
Ruby-throated Hummingbird	Female westerly and late, Coldwater L.	Comanche	6/07	TE
Ruby-throated Hummingbird	2 at feeder near Wilson, westerly and late	Russell	6/10	DK
Ruby-throated Hummingbird	Pair with male doing display, Pratt	Pratt	6/15	MR
Black-chinned Hummingbird	1 female in Dodge City back yard	Ford	7/19	JC
<u>Black-chinned Hummingbird</u>	1 at rural residence near Arlington	Reno	8/13	AM
Black-chinned Hummingbird	1 female, Shane's yard, Garden City	Finney	8/27	SSh, TS
Broad-tailed Hummingbird	1 immature, Shane's yard, Garden City	Finney	8/22	SSh, TS
Rufous Hummingbird	Immature or female, first of season, Larned	Pawnee	7/12	DKz
Rufous Hummingbird	1 immature at feeder in Overland Park	Johnson	7/29	BW

Species	Number and Location	County	Date	Observer(s)
Calliope Hummingbird	1 immature male, Shane yard, Garden City	Finney	8/09	SSh, TS
Peregrine Falcon	1 seen overhead, Overland Park	Johnson	6/05	BW
Yellow-bellied Flycatcher	1 heard and seen west of Hutchinson	Reno	8/23	AM, JM
Eastern Kingbird	<u>48</u> in migration flock near Kalvesta	Finney	8/23	SSh, TS
Red-breasted Nuthatch	1 in northeast neighborhood of Dodge City	Ford	8/03	JC
Red-breasted Nuthatch	1 at Middle Springs, CNG	Morton	8/26	ABu
<u>Louisiana Waterthrush</u>	1 seen and heard near Plevna, westerly	Reno	8/10	JM
<u>Blue-winged Warbler</u>	1 near Arlington, photographed	Reno	8/24	AM
Black-and-white Warbler	1 very agitated male near Ark River in Derby	Sedgwick	7/17	JC
American Redstart	1 female, Smoky Hill River near Wilson	Ellsworth	8/21	DK
Summer Tanager	1 somewhat westerly out of migration	Republic	7/03	PW
Clay-colored Sparrow	<u>56</u> in numerous small flocks, near Kalvesta	Finney	8/23	SSh, TS
Chipping Sparrow	1 late migrant, CNG	Morton	6/02	BrM
Lark Bunting	1 female easterly at Shawnee SFL, photos	Shawnee	8/30	CMo
Savannah Sparrow	1 early at Stockdale Park, Tuttle Creek	Riley	7/15	BS
Harris's Sparrow	1 late at Baker Wetlands, Lawrence	Douglas	6/17	RB
Orchard Oriole	<u>45</u> in one migration flock	Finney	8/23	SSh, TS
Bullock's Oriole	1 in rural timber, photo	Reno	8/30	AM
Pine Siskin	In St. Francis, more summer reports	Cheyenne	6/08	SM, NM

Locations and notes: BBS – Breeding Bird Survey, BSM-QNWR – Big Salt Marsh, Quivira National Wildlife Refuge, CBW-MA – Cheyenne Bottoms Wildlife Management Area, CNG - Cimarron National Grasslands, CRP – Conservation Reserve Program grasslands, MDC - Marais des Cygnes Area, QNWR – Quivira National Wildlife Refuge, SFL – State Fishing Lake, Underlined species name indicates new county record. Underlined number indicates an exceptionally high count.

Observers: Nic Allen, Tony Andresen, Aaron Balogh, Roger Boyd, Andrew Burnett (ABu), Jeff Calhoun, Jacob Cooper (JCo), , Colin Dobson, Tom Ewert, Matt Gearheart, Jennifer Hammett, Barry Jones, Kansas Department of Wildlife, Parks, and Tourism personnel, Don Kazmaier (DKz), Dave Klema, Owen Krout, Mark Land, Dan Larson, Jonathan Lautenbach, Micky Louis (MLo), Brandon Magette (BrM), Randall Marler, Mick McHugh (MMH), Andrew Miller, Joseph Miller, Steven Mlodinow, Nick Moore, Carol Morgan (CMo), Chuck Otte, Galen Pittman, Edward Raynor, Brett Sandercock, Sara Shane (SSh), Tom Shane, Nate Shipley, Phil Wedge, Bryan White, John Zempel, Linda Vidosh-Zempel (LVZ), mob – multiple observers

Two new species added to Kansas Checklist

In the recent round of rare bird evaluations, the Kansas Bird Records committee accepted two new species to the Kansas Bird Checklist.

Pacific Wren - In 2010, the American Ornithologists Union Checklist Committee split the Pacific Wren from the Winter Wren based on differences in DNA and vocalizations. On December 20, 2014, Jeff Calhoun and Henry Armknecht found a small wren at Scott State Park that looked similar to a Winter Wren but with a very different call. Jeff was able to record the call and when the call was processed through spectrogram software it provided proof that the bird was not a Winter Wren but a Pacific Wren. Pacific Wrens are known from Colorado. KBRC record #2015-21.

Piratic Flycatcher - On the late afternoon of Friday, May 8, 2015 Chris Lituma, a post-doctorate researcher at the University of Tennessee, was birding at Scott State Park with several students (just a week after the KOS Spring Field Trip was there.) Chris and his students found a flycatcher that did not match any expected species for western Kansas or the western United States. After nearly an hour of intensive study and looking at field guides it was determined to be a Piratic Flycatcher, a tropical species. Photos were soon posted to social media and other internet sources. Thanks to the quick posting of the sighting, many birders were able to travel to Scott State Park on Saturday and Sunday to view and further photograph the flycatcher. The bird was last seen mid day on May 10th. There are a handful of records from north of Mexico, most from Texas and New Mexico. KBRC record #2015-16

Fall KOS meeting paper abstracts

(presenter indicated by * following name)

Effects of wind power development and rangeland management on Greater Prairie-Chickens.

*Brett Sandercock**, Division of Biology, Kansas State University; *Andrew Gregory*, School of Earth, Environment and Society, Bowling Green State University; *Lance McNew*, Department of Animal and Range Sciences, Montana State University; and *Virginia Winder*, Department of Biology, Benedictine College. The objectives of our study were to investigate the effects of wind power, prescribed fires, and grazing intensity on the movements and demographic performance of Greater Prairie-Chickens (*Tympanuchus cupido*). We used a before-after control-impact design to test for potential impacts of energy development on male lek attendance, and movements, reproductive success and survival of females. In a 6-year period, we monitored 23 lek sites, 251 radio-marked females, and 264 nesting attempts. Energy development had a weak effect on lek attendance: probability of lek persistence increased with distance from turbines, and most abandoned leks were <5 km from turbines. Leks in native grasslands with >10 males were stable and had the highest probability of persistence. Females exhibited behavioral avoidance of turbines with increased home range size and less space use near turbines. However, proximity to energy development did not affect nest site selection or nest survival. Instead, the strongest correlate of site selection and survival of ground nests was the available vegetative cover, which was determined by prescribed fire and grazing intensity. Unexpectedly, female survival increased after wind power development, possibly because turbines disrupted foraging by predators during the lekking period. Most demographic losses to prairie chicken populations were due to predation by coyotes and other mesocarnivores. To improve productivity, we have tested the potential benefits of a patch-burn grazing system with rotational fire and grazing. Nesting densities were higher in areas rested from fire and improved nesting cover increased nest survival in two drought years. Patch-burn grazing is a promising technique for rangeland management because it can be applied on private lands used for livestock grazing in Kansas.

Testing stacked species distribution models: Predicting species richness and community composition in hummingbirds (Aves: Trochilidae).

*Jacob C. Cooper**, University of Kansas Biodiversity Institute. Conservation and biodiversity research worldwide has generally been limited and biased towards hotspots and regions with relatively easy access. Most of what we know about species distributions is an artifact of this incomplete sampling and is therefore spatially limited from the outset. Species distribution models (SDMs), created by interpreting the species' realized environmental niche from locality data, are an important step towards estimating a species' spatial extent and centers of distribution. Multiple SDMs can be aggregated and summed (i.e., 'stacked') to produce multi-species presence-absence matrices (PAMs) that can predict species richness and community composition in any given locality. In order to test the effectiveness of stacking methodologies, SDMs were created for 293 species of hummingbird (approximately 85.6% of all described species), trained in both biogeographic and 'unconstrained' areas, and tested against 13 non-random localities. Model outputs were thresholded at 95% and stacked. Test localities were defined as a circle with a radius of 20 kilometers centered at a well-sampled location. Known species lists were aggregated from the eBird database and from official checklists when available. Theoretical species lists were defined by the same locality circles and thresholded by species for 25% presence for comparison to known richness. Unconstrained models greatly overpredicted species richness and community composition, while biogeographic models performed significantly better and show promise for future research (Wilcoxon rank-sum tests: richness $W=168$, $P<0.001$; community composition $W=2$, $P<0.001$). These results highlight the inherent problems associated with current stacking methodologies and reveal how properly trained models improve community and richness predictions.

Tail feathers as fingerprints? Quantitative analysis of color variation among individual Ruffed Grouse. *Alexis F. L. A. Powell**, Department of Biological Sciences, Emporia State University.

The color patterning of the Ruffed Grouse (*Bonasa umbellus*) is complex, as in other grouse (Tetraoninae), but more variable than in other species. It differs regionally, by sex, according to red and gray phases within populations, and among individuals within phases. Some variation is known to be age or condition related, but adult plumage is nevertheless thought to be similar enough through successive molts to be used for individual identification, the color patterning of the central tail feathers being likened to human fingerprints. Despite longstanding interest in Ruffed Grouse coloration, it has rarely garnered rigorous study and has not been described quantitatively. I measured the color of central tail feathers collected from Ruffed Grouse banded and recaptured at Cloquet Forestry Center, Minnesota. I found that coloration differed significantly among individuals, even after accounting for phase, but that feathers collected from the same individual in different years were extremely similar. Age, assessed as years since first capture, had a significant effect on feather length but not on color. Neither the coloration of feathers nor their lengths differed significantly by calendar year. I conclude that Ruffed Grouse coloration is generally little influenced by environmental factors during feather growth and that the mechanisms that govern feather patterning must be set within each follicle during early development or under strong genetic control.

Effects of habitat heterogeneity on grassland songbird fecundity in an experimental landscape. *Bram H.F. Verheijen (*) and Brett K. Sandercock, Division of Biology, Kansas State University.* In North America, tallgrass prairie was historically maintained by a fire and grazing interaction. In recent decades, intensification of agricultural practices in managed grasslands has led to more homogeneous landscapes, which caused widespread declines in songbird populations. Patch-burn grazing management increases heterogeneity in vegetative structure, as only a third of the pasture is burned each year in a three-year rotational scheme, and movements of cattle are not restricted. Patch-burn grazing management increases bird diversity, and has species-specific effects on bird abundance. However, the consequences on bird reproductive output are unknown. We assessed how patch-burn grazing affected the reproductive output of three species of declining grassland songbirds in tallgrass prairie. Our study was conducted at Konza Prairie Biological Station, a tallgrass prairie reserve in northeast Kansas. Between 2011 and 2015, we monitored nests of Dickcissels (*Spiza americana*), Eastern Meadowlarks (*Sturnella magna*) and Grasshopper Sparrows (*Ammodramus savannarum*). We compared nest survival and brood parasitism rates by Brown-headed Cowbirds (*Molothrus ater*) among three pastures

managed with a patch-burn grazing regime and two controls. We found that nest survival of Dickcissels was highest on the patch-burn grazing treatment, but found no treatment effect for the other species. Rates of cowbird parasitism were high on all treatments, but highest on pastures that were grazed by cattle, and parasitized nests faced a 50% reduction in the number of host eggs. Bird abundance alone did not reflect the effects of management on reproductive output and did not sufficiently determine the effects of grassland management regimes on wildlife.

Resolving an avian enigma: Natural history and ecology of the *Sapayoa aenigma*. *Johnathan P. Hruska*, S. Dzielski, B. Van Doren. University of Kansas Biodiversity Institute.* The Sapayoa (*Sapayoa aenigma*), as implied in its scientific name, has long befuddled ornithologists. Originally considered to be part of the Pipridae (manakins), and then shuffled to *incertae sedis* within the New World Suboscines (Tyrannides) based on morphological characters, its systematic placement has only become recently unambiguous, with molecular evidence unequivocally nesting it within the Old World Suboscines (Eurylaimides) (Fjeldsa et al 2003; Moyle et al 2006). This placement has inspired discussion regarding the evolutionary timing of the origin of Old World Suboscines, with some claiming a Gondwanan origin (Moyle et al 2006) and others arguing for a Laurasian origin (Fjeldsa et al 2003). In addition, due to its restriction to the largely inaccessible Chocó Bioregion, the Sapayoa has been poorly studied in the field. Its natural history has been long overlooked and understudied, with only a single nest description (Christian 2002) and few notes on its foraging ecology comprising all that was historically known. Here, we present detailed and novel insights into its natural history and ecology, all compiled from field observations of several individuals during a five-week study in the Darien National Park, Panama during June 2014. We present the first detailed and comprehensive description of parental effort (brooding, feeding) during the entire nesting period; first morphological descriptions of nestlings; detailed notes on territory size and habitat preference; comprehensive and species specific descriptions of mixed-foraging flocks they frequented; and novel vocalizations, including a non-vocal “sonation”. Finally we present preliminary evidence that Sapayoa are a social species, particularly during the nesting period, which suggests that engage in cooperative breeding. We aim to use this information in conjunction with other natural history knowledge of the Old World Suboscines to conduct a more comprehensive comparative phylogenetic study of this poorly understood avian group.

The influence of habitat composition and configuration on lesser prairie-chicken survival rates in Kansas. *Samantha G. Robinson**, Division of Biology, Kansas State University; *David A. Haukos*, U. S. Geological Survey, Kansas Cooperative Fish and Wildlife Research Unit, Kansas State University. Landscape fragmentation is a ubiquitous concern for grassland bird species. However, these functional descriptors of the landscape could be influencing survival at multiple spatial scales. The lesser prairie-chicken (*Tympanuchus pallidicinctus*) is a landscape-scale species that has experienced population declines and range restrictions. Determining the effect of landscape fragmentation on lesser prairie-chicken survival can assist landscape managers to prioritize areas of the landscape that require land mitigation and conservation to stimulate future population growth. I used annual survival rates of lesser prairie-chickens in three study sites in Kansas to determine the effect of landscape fragmentation and composition on lesser prairie-chicken survival. Survival rates in northwestern Kansas were 53% lower than in Clark County and 44% lower than in the Red Hills. These differences may be driven by differences in habitat fragmentation at the landscape scale, as the northwestern site had more total patches, less grassland, and a smaller mean patch size in relation to the Red Hills and Clark County sites. In addition, I used composition within home ranges of lesser prairie-chickens to determine if percentage of crop, CRP or grassland had an effect on weekly survival rates. Relationships show that when cropland makes up about 30% of home ranges, weekly survival is maximized for northwestern and Clark County, Kansas. These results indicate that although landscape fragmentation may be hampering lesser prairie-chicken survival at the landscape scale, individuals seem to be benefiting from landscapes with more vegetation types available to them.

Morphometric measurements reveal intraspecific variation and sex differences in three species of long-legged wading birds. *Alan D. Maccarone** Biology Department, Friends University; and *John N. Brzorad*, Reese Institute for Conservation of Natural Resources. Intraspecific and intersexual morphological variation is common in many groups of birds, but few data regarding such differences exist for Ardeids. Since 2008, we have trapped long-legged wading birds in Kansas and along the East Coast for telemetry studies. Captured individuals are weighed and several measurements taken before they are released. Beginning in 2013, a blood sample was collected from each bird, which was used to determine its sex. Measurements of 103 birds of three species were used to examine relationships among mass, culmen length, and tarsus length, and to determine whether males of each species differ from females in

these values. Great Blue Herons (1702-2859 g), Great Egrets (1769-1300 g), and Snowy Egrets (349-539 g) all showed high variation both in body weights and morphometric measurements. For all three species, weight was correlated significantly both with culmen and tarsus lengths, which were themselves strongly associated. For Great Egrets and Snowy Egrets, males were significantly heavier than females and also had longer culmen and tarsus lengths (all $P < 0.003$). Sample size for Great Blue Herons was not large enough to compare male and female birds. We discuss the possible implications of intraspecific variation and sexual differences in Ardeids.

Foraging microhabitat selection by long-legged wading birds at an artificial weir. *Jeane A. Thompson*, *Rachel E. Renken*, and *Alan D. Maccarone*, Friends University. To better understand how wading birds select among different microhabitats at foraging sites, we divided a 100-m-long concrete weir located at the terminus of the Little Arkansas River in Wichita into 10 zones based on physical characteristics. We observed five species of wading birds during 60 1-h periods from 12 June-28 July, and documented microhabitat use and feeding behavior. The independent variables collected before each session included time of day, Julian date (a proxy for stage of the breeding season), water level, visibility, and flow velocity. We recorded bird abundance in each zone, and for each species documented foraging efficiency, prey length (relative to bill length), and aggressive interactions. Black-crowned Night-Herons ($n = 396$), Great Egrets ($n = 54$), Snowy Egrets ($n = 36$), and Great Blue Herons ($n = 30$) were the most abundant species. Time of day and water level were the only significant predictors of the number of birds recorded at the weir. A total 348 fish were captured, of which 108 were large (3/4 bill length or greater). Wading bird species differed in strike rates, capture rates, foraging efficiency, mean prey lengths, and the primary weir microhabitats used for foraging. Great Blue Herons and Black-crowned Night-Herons captured mainly large fish (gizzard shad, catfish, and freshwater drum); Great Egrets captured both large and small fish, and Snowy Egrets captured mainly small fish (minnows). The number of large fish captured declined significantly over the course of the breeding season. The overall aggression rate was correlated with the number of large fish captured per hour but not with total fish, whereas the *per capita* aggression rate was correlated with the total number of birds at the weir. Electro-fishing showed a non-uniform distribution of fish among the 10 weir microhabitats. This pattern of fish spatial distribution was reflected in prey-capture patterns, where mean fish length differed significantly by patch, and ranged from 2.8 cm to 11.9 cm. We discuss possible implications from our study.

Intra-summer movement and probable dual breeding sites of the Marsh Wren (*Cistothorus palustris*); a *Cistothorus* ancestral trait? Mark B. Robbins, *Division of Birds, University of Kansas Biodiversity Institute*. Midwest breeding populations of the eastern North American Marsh Wren (*Cistothorus p. palustris*) perform intra-summer movements presumably to breed at two different locations during the same summer. It appears that birds that initially breed during May-June move south to breed again during mid-July through August. Because this unique behavior is shared with its closest living relative, the North American Sedge Wren (*C. platensis stellaris*), it may be an ancestral trait of *Cistothorus*.

Patterns and predictors of breeding habitat occupancy in a highly mobile grassland bird: A multi-scale approach. Mark R. Herse, *Division of Biology, Kansas State University*; Mike Estey, *Habitat and Population Evaluation Team (HAPET), U.S. Fish & Wildlife Service*; and W. Alice Boyle, *Division of Biology, Kansas State University*. Breeding habitat selection is a fundamental process in animal ecology that influences individual fitness and population viability. Prior research suggests prospecting animals respond to both habitat composition (amount) and configuration while assessing landscapes, with configuration becoming increasingly important as focal habitat composition declines. However, empirical data is lacking to identify the scale or percent (%) range of composition where configuration effects likely occur. Moreover, the habitat fragmentation paradigm is largely based on ecology of forest birds, which may exhibit different responses to edge and matrix effects than grassland birds. We ask, what is the relative importance of landscape composition and configuration in predicting breeding habitat occupancy in a highly mobile grassland bird, and how does it change between scales? We will use Henslow's Sparrow count data to test whether landscape a) composition, b) configuration, or c) an interaction between both, predict occupancy. We repeat-surveyed for Henslow's Sparrows at 1,425 stations along 57 20-km transects in eastern Kansas in 2015. We detected individuals ($n = 53$) at 44 stations along 27 transects, but never at the same station more than once. Data collection will resume in 2016. We will combine count data and detectability estimates with remotely-sensed habitat data to model occupancy relative to composition and ecologically relevant configuration metrics measured at multiple scales (200–3200 m). We will distinguish between hypotheses by comparing models and covariates using an information-theoretic approach. Identifying the relative effects of grassland fragmentation on Henslow's Sparrow occupancy will im-

prove our understanding of the habitat selection process and help to mitigate habitat loss.

Grassland Nesting Bird Community Response to Sericea Lespedeza Control Using Fire and Grazing. Sarah Ogden*, *Kansas Cooperative Fish and Wildlife Research Unit, Division of Biology, Kansas State University*; David A. Haukos, *U.S. Geological Survey, Kansas Cooperative Research Unit, Kansas State University*; KC Olson, *Department of Animal Sciences and Industry, Kansas State University*; Jonathan Alexander, *Department of Animal Sciences and Industry, Kansas State University*; Jack Lemmon, *Department of Animal Sciences and Industry, Kansas State University*. *Sericea lespedeza* (*Lespedeza cuneata*) is an invasive forb that reduces native grass and forb abundance in tall-grass prairie by up to 92%. Owing to its high fecundity, phenology, and high tannin content, traditional management techniques (i.e., herbicide use, prescribed spring fire, and cattle grazing) are ineffective at controlling the species. We assessed breeding grassland bird response to two potential methods for controlling sericea lespedeza in the Kansas Flint Hills: 1) use of mid- and late-summer prescribed fires and 2) grazing by sheep in addition to steers. We conducted fixed-radius point counts and monitored grassland bird nests to measure grassland bird community composition and estimate reproductive output. Grasshopper sparrows (*Ammodramus savannarum*) were more abundant in mid-summer and late summer fire treatment units than in spring fire units as well as in units grazed by steer and sheep compared to units grazed by only steer. Species diversity, species richness, density of grassland birds, and reproductive output did not differ between treatments and controls. Our results indicate that summer prescribed fire and additional grazing by sheep will not negatively impact the grassland nesting bird community in the tall-grass prairie and grasshopper sparrow populations may benefit from such treatments.

Habitat Use by Secretive Marsh Birds in Moist-Soil Managed Wetlands in Eastern Kansas. Eric Wilson* and William Jensen, *Department of Biological Sciences, Emporia State University*; Richard Schultheis, *Kansas Department of Wildlife, Parks and Tourism*. Moist-soil management is a common form of wetland management for waterfowl, where wetlands are dewatered in spring to enhance summer vegetative production, and flooded in the fall to accommodate waterfowl. The use of moist-soil wetlands by other marsh birds has received little study. Our objective was to determine variation in abundance of bitterns (Ardeidae) and rails (Rallidae) in relation to habitat structure within and among moist-soil

wetlands in Eastern Kansas. Study sites included Flint Hills National Wildlife Refuge, Marais des Cygnes National Wildlife Refuge and State Wildlife Area, and McPherson Valley Wetlands State Wildlife Area. We used call-playback surveys (spring, summer) and flush counts (fall). Surveys were performed during spring and fall migration and summer breeding seasons. Only 6 birds from three species (American Bittern, *Botaurus lentiginosus*; Least Bittern, *Ixobrychus exilis*; and Sora, *Porzana carolina*) were detected in three of 31 moist-soil units surveyed during spring and summer of 2014. During the fall of 2014, a total of 24 American Bittern, 4 Least Bittern, and 57 Sora were detected in 16 out of 24 units surveyed. There were no significant patterns in abundance of these species with marsh-wide habitat characteristics during fall. However, during fall surveys Sora were detected in areas within marshes with lower vegetation coverage than American Bittern locations or systematic sampling points. American Bitterns were detected in areas with higher cattail (*Typha*) coverage than Sora locations or systematic sampling points within marshes. Survey results from spring and summer of 2015 will be presented.

Lesser Prairie-Chicken diets during brooding and winter. Dan S. Sullins*, *Kansas Cooperative Fish and Wildlife Research Unit, Department of Biology, Kansas State University*; David A. Haukos, *U.S. Geological Survey, Kansas Cooperative Fish and Wildlife Research Unit, Department of Biology, Kansas State University*. Survival during brooding and winter periods can be critical for assessing factors influencing lesser prairie-chicken (LEPC, *Tympanuchus Pallidicinctus*) population growth rates. Food may be particularly important during these periods; rapidly growing LEPC chicks have high calorie demands and are restricted to foodstuffs within their immediate surroundings. Furthermore, during cold winters, meeting thermoregulatory demands on available food items of limited nutrient content may be challenging. Therefore, our objective was to determine the primary animal and plant components of LEPC diets among native prairie, farmland, and Conservation Reserve Program (CRP) fields in Kansas and Colorado during brooding and winter using a DNA barcoding approach. LEPC fecal samples (n = 314) were collected during the summer of 2014 and winter of 2014–2015, labeled, frozen, and DNA was extracted. Sequences were classified to Order for invertebrates and Genus for plants based on the best matching barcode. To determine species consumed, sequences of the cytochrome oxidase I (COI) gene was used for animals and the trnI plastid region was used for plants. Among 80 readable fecal samples for invertebrates, 35% of the sequences were from Lepidop-

tera, 26% from Orthoptera, 14% from Araneae, and 13% from Hemiptera. Plant sequences from 137 fecal samples were comprised of *Ambrosia spp.* (28%) followed by species in genera similar to *Symphyotrichum* (10%), *Medicago* (6%), and *Triticum* (5%). The predominant use of Lepidopteran prey contrasts with past research for which Orthopterans were the main dietary component. Management that incorporates the seeding of alfalfa into CRP fields may benefit LEPC.

Identifying drivers of Lesser Prairie-Chicken habitat selection within western Kansas grazed lands. John D. Kraft*, *Division of Biology, Kansas State University*; David Haukos, *U.S. Geological Survey, Kansas Cooperative Fish and Wildlife Research Unit, Kansas State University*; Jim Pitman, *Western Association of Fish & Wildlife Agencies*; Christian Hagen, *Oregon State University*. The Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*; hereafter LEPC) is a grouse species endemic to the grasslands of the southern Great Plains. Population declines throughout the species distribution has resulted in conservation concern and action. The vast majority of the species range occurs on private grazed lands. Therefore, knowledge of LEPC population responses to livestock grazing strategies would aid in conservation planning. We investigated the effects of various grazing pressures on habitat selection within Kansas grazed lands. During the springs of 2013, 2014, and 2015, individuals were captured on breeding/display grounds (leks) and fitted with either a 17-g VHF bib-style transmitter or a 22-g model 100 GPS Platform Transmitting Terminal (PTT). Locations of tagged birds were recorded. Grazing data were collected via producer correspondence and vegetation surveys. Initial results indicate that functional grasslands are an important resource for LEPC populations during all seasons. Furthermore, measures of LEPC habitat selection were positively correlated with lower values of grazing intensity (AUM and percent forage utilization rates), greater pasture area, timing of grazing, and ecological site. Analyses indicated sandy and limy upland ecological sites are selected over other available range sites. Relating measures of livestock disturbance in grasslands with LEPC population metrics can provide additional information for LEPC conservation and management.

The influence of watershed conditions on avian use and diversity of playa wetlands in western Kansas. Willow Malone*, *Kansas Cooperative Fish and Wildlife Research Unit, Division of Biology, Kansas State University*; David A. Haukos, *U.S. Geological Survey, Kansas Cooperative Fish and Wildlife Research Unit, Kansas State University*. Playa wetlands are keystone eco-

systems of the High Plains region of the Great Plains supporting large numbers of migratory and resident avian species. Previous research focused on the influence of habitats in the Southern High Plains in Texas and the Rainwater Basin of Nebraska, with little available information on landscape influences to the playa wetlands located in the Central Plains. Our objective was to determine the relationship of surrounding land use (i.e., grassland or cropland) on avian use of playa wetlands naturally occurring in the High Plains of western Kansas. We conducted breeding bird surveys in >25 playa wetlands with differing watersheds to record occupancy, relative abundance, and species richness. Species diversity was derived using Simpson's index. Similar surveys were conducted in paired, non-playa habitats. Results indicate that playa habitats have a higher avian diversity than non-playa habitats. Furthermore, avian diversity was greatest in playa wetlands in a grassland landscape, followed by non-playa grassland habitats, and playas in a cropland having the lowest avian diversity. While grassland playas had the highest diversity index, cropland playas had the highest species richness and the highest number of unique avian species to that habitat not found in the other habitats. Preliminary findings indicate that watershed condition influences species occurrence, abundance, and diversity in playa wetlands. Further, playas support a greater avian diversity than non-playa habitats, even in a dry ecological state.

The use of habitat thresholds for conservation and management of priority grassland birds. *John Schukman**, Leavenworth, KS; *Gina Barton*, San Francisco Bay Bird Observatory; *Jeff Neel*, Kansas Alliance for Wetland & Streams; and *James K. Starling*, Mission Command Capability Development Integration Directorate, Ft Leavenworth KS. Grassland obligate birds of conservation concern, when collectively present, comprise an important component of a healthy tallgrass prairie habitat. Birds classified as priority species include Greater Prairie-Chicken and Henslow's Sparrow as Tier I, and Upland Sandpiper, Grasshopper Sparrow, and Eastern Meadowlark as Tier II Species of Greatest Conservation Need. We identified potential threshold areas in eastern Kansas using Breeding Bird Survey abundance compared to the amount of grassland habitat at different scales. Not enough data for Greater Prairie-Chicken and Henslow's Sparrow was available to converge any meaningful statistics. For the remaining species most abundance/habitat relationships had significant breakpoints and the explained variation, although weak, improved with scale. We used a single-visit occupancy model, taking into account for variation in detection, to

predict thresholds at the largest scale. We created a two-level threshold map to suggest possible boundaries for habitat management.

Flint Hills winter bird surveys. *Pamela Moore**, *Tom Wittig* and *Mike Estey*, *Habitat and Population Evaluation Team*, U.S. Fish and Wildlife Service. Despite wide recognition that the Flint Hills are a vital source of habitat for grassland and migratory birds, we remain largely unaware how the ecoregion serves wintering birds. Existing surveys are predominantly focused on migratory and breeding seasons. We designed an annual landscape scale, roadside survey to be conducted during the winter period of November 15th to February 15th. Our routes were geographically stratified and randomly assigned to ensure they capture an accurate representation of wintering bird habitat use. With the data provided by this survey, we intend to construct habitat models indicating the probability of occurrence across the Flint Hills for species of interest and concern. If repeated over several years, we also expect the survey data to yield population trends. The Fish and Wildlife Service will apply this information to our prioritization of land for easement agreements and other management strategies.

Foraging behavior of woodland birds under conditions of varying uncertainty. *Taylor L. Criss** and *Calvin L. Cink*, *Department of Biology and Chemistry*, Baker University. During the winter of 2014-2015, I performed a manipulative experiment to determine if the amount of time a bird spends foraging is related to the predictability of the food supply. In most animal species, an animal must decide how to spend its time in order to maximize energy intake. To test the hypothesis that as degree of uncertainty about presence or absence of food in a feeder increases, a bird should sample more of a feeder without success before moving on, I created an artificial foraging environment with varying levels of food in manipulated feeders to measure the amount of time a bird spent at a feeder. The species in the study included Tufted titmouse (*Baeolophus bicolor*), White-breasted Nuthatch (*Sitta carolinensis*), Downy woodpecker (*Picoides pubescens*), and Red-bellied woodpecker (*Melanerpes carolinus*), all of which responded differently to the treatments. Both woodpecker species showed a response to the treatments, whereas neither the White-breasted Nuthatch nor the Tufted titmouse responded to the treatment in a statistically significant way. These results suggest that different species of birds with different foraging strategies respond differently to conditions of varying uncertainty in food sources.

KOS Fall Meeting Field Trip Species Compilation List

KOS Fall meeting attendees found the following 94 species October 2 - 5, 2015 in Lyon and Coffey Counties. Thanks to William Jensen and Alexis Powell for leading the Sunday field trips!

Canada Goose
Wood Duck
Blue-winged Teal
Northern Shoveler
Northern Pintail
Northern Bobwhite
Pied-billed Grebe
Double-crested Cormorant
American White Pelican
Great Blue Heron
Great Egret
Green Heron
Turkey Vulture
Bald Eagle
Northern Harrier
Sharp-shinned Hawk
Cooper's Hawk
Red-shouldered Hawk
Red-tailed Hawk
American Coot
Killdeer
Greater Yellowlegs
Lesser Yellowlegs
Stilt Sandpiper
Least Sandpiper
Long-billed Dowitcher
Franklin's Gull
Ring-billed Gull
Rock Pigeon
Eurasian Collared-Dove
Mourning Dove
Yellow-billed Cuckoo
Great Horned Owl

Chimney Swift
Ruby-throated Hummingbird
Belted Kingfisher
Red-headed Woodpecker
Red-bellied Woodpecker
Yellow-bellied Sapsucker
Downy Woodpecker
Hairy Woodpecker
Northern Flicker
Pileated Woodpecker
American Kestrel
Eastern Wood-Pewee
Eastern Phoebe
Scissor-tailed Flycatcher
Loggerhead Shrike
Bell's Vireo
Blue Jay
American Crow
Horned Lark
Tree Swallow
N. Rough-winged Swallow
Barn Swallow
Black-capped Chickadee
Tufted Titmouse
White-breasted Nuthatch
House Wren
Sedge Wren
Marsh Wren
Carolina Wren
Ruby-crowned Kinglet
Eastern Bluebird
American Robin
Gray Catbird
Northern Mockingbird
European Starling
Cedar Waxwing
Orange-crowned Warbler
Nashville Warbler
Common Yellowthroat
Yellow-rumped Warbler
Wilson's Warbler

Chipping Sparrow
Field Sparrow
Savannah Sparrow
Le Conte's Sparrow
Song Sparrow
Lincoln's Sparrow
Swamp Sparrow
White-throated Sparrow
White-crowned Sparrow
Northern Cardinal
Indigo Bunting
Dickcissel
Red-winged Blackbird
Eastern Meadowlark
Common Grackle
Great-tailed Grackle
Brown-headed Cowbird
House Finch
American Goldfinch
House Sparrow

Celia Markum White Student Paper Award

Each year a KOS panel of judges select presented student papers to be designated as Celia Markum White Student Paper Award winners. Celia was an early KOS president. This year cash awards were presented to Mark Herse, Sarah Ogden, and Eric Wilson. Abstracts of their papers can be found in the Paper Abstracts section on pages 8 to 13.

2015 Kansas Ornithological Society meeting minutes

General Membership meeting, October 3, Emporia State University.

Morning Session

The meeting was called to order at 11:37 a.m. by President Matt Gearheart.

Nomination Committee:

Mike Rader, Nominating Committee chairman, presented the slate of officers for 2015/2016: President – Matt Gearheart; Vice President – Robert Penner; Corresponding Secretary – Chuck Otte; Treasurer – Max Thompson; Membership Development Coordinator – Patty Marlett; Business Manager – Lisa Weeks; KOS Bulletin Editor – Eugene Young; Horned Lark Editor – Vacant; Past President – Henry Armknecht; Board Members – Jeff Calhoun, Jenn Rader, Barry Jones, and Alexis Powell. The slate will be considered in the afternoon membership meeting.

Student Research Committee:

John Schukman reported that in the past year one study was funded. John encouraged the students present to apply for research funds. They should contact John for information on how to apply.

Bulletin:

Gene Young, *Bulletin* Editor, reported that he had recently received two manuscripts that are being reviewed. He is still looking for additional items for the September and December issues. He encouraged students that were presenting papers to consider writing them up for publication in the *Bulletin*.

Kansas Bird Records Committee:

Chairman of the KBRC, Gene Young, reported that the first round of voting on records submitted in 2015 had just wrapped up. Gene indicated that the committee would be discussing a checklist update as well as a review of the KBRC Review List and the KBRC Procedural Rules.

Horned Lark:

Chuck Otte, interim editor, encouraged anyone interested in being the Horned Lark editor to contact him for more details. He asked Christmas Bird Count compilers to please start sending in details for their upcoming counts so they can be posted on the web at KSBIRDS.ORG.

Business Manager:

Lisa Weeks, Business Manager, reminded everyone that KOS does have a Facebook page and encouraged folks to follow it. Lisa discussed current merchandise available from her as well as the option to custom order items through Zazzle. This option can be found on the merchandise web page of KSBIRDS.ORG.

Membership:

Patty Marlett reported that we currently have 319 members. There has been a nominal increase in recent years.

Secretary:

Chuck reported that outgoing secretary Curtis Wolf was out of state and not able to be at the fall meeting but had already given him all the secretarial historical records.

Upcoming Meetings:

Max Thompson announced that the spring meeting would be May 6 – 8, 2016 and would be headquartered at Camp Horizon near Arkansas City.

Rob Penner moved to adjourn the morning Business Meeting. The motion was seconded and passed. The meeting was adjourned at 11:45 a.m.

Afternoon Session

President Matt Gearheart called the meeting to order at 5:15 p.m.

Treasurer:

Max Thompson presented the Treasurer's report. KOS currently had \$6,966 in their checking account (but Max pointed out that

none of the fall meeting bills had been paid yet.) Investments were valued at \$173,213, as of September 25, 2015.

Election of the Board:

Matt reviewed the slate from the nominating committee and asked for any nominations from the floor. **Terry Mannell moved to cease nominations and cast a unanimous ballot for the presented slate. The motion was seconded and passed unanimously.**

Matt and, Fall Meeting Chair, William Jensen made announcements about the evening's banquet and the Sunday morning field trips.

Seeing no further business, Matt declared the meeting adjourned at 5:20 p.m.

Fall Board Meeting

The KOS Board met over lunch on October 3, 2015 at Emporia State University.

President Matt Gearheart called the meeting to order at 11:54 a.m. Attendance: Matt Gearheart, Max Thompson, Patty Marlett, Jennifer Rader, Lisa Weeks, Rob Penner, Eugene Young, Cheryl Miller, and Chuck Otte. Also in attendance was incoming board member Alexis Powell.

Matt had no further report over what was said at the morning membership meeting.

Vice President:

Rob reported that there were 18 papers scheduled for the day. Several came in at the last minute but he was pleased with the response.

Membership:

Patty distributed the Membership Report. Membership was up slightly. It will be interesting to see if being able to pay membership with PayPal on line will improve renewal rates. It was asked if, in light of all students receiving one year free membership if they present a paper, how many of those renew the following year. Patty indicated that very few do renew.

Secretary:

As Curtis was out of state, he had

emailed the board the following items: Minutes from last year's Fall KOS Board meeting and Business meeting held October 4, 2014 in Salina. Minutes from the Winter KOS Board meeting held January 24, 2015 in Wichita. A summary of all board motions/ votes/discussions made through email correspondences over the past year from October 2014 through the end of September. Max moved to approve the minutes Curtis had sent out. The motion was seconded and passed.

Treasurer's Report:

Max distributed the KOS Balance Sheet as of October 3, 2015. He also distributed a consolidated investment account report. Given the volatility of the markets currently, the investment account is doing okay. Total assets from all sources, less the Dingus property, was \$180,179.

Either in response to questions or simply as explanation of the balance sheet, Max presented the following information. The Dingus Nature Area Fund is monies set aside to maintain that property as per our agreement. A new sign will be put up at the Dingus property this fall. The Life Membership Account is where funds from life membership payments are placed. The intent is that interest off of these funds helps to pay the expenses for those members who are life members since they don't pay annual dues. When a life member passes away, their life membership payment stays in that account. Fall meeting expenses will be paid from the checking account.

Student Research Committee:

Student research funds need to be applied for by December 31st. Rob said he would use the same email list he developed to solicit student papers to distribute information on student research funds and how to apply for them. John Schukman, Chair of the Student Research Committee, had supplied a written report which was distributed and reviewed. There was one Student Research Award presented in 2015. \$600 was awarded to Sarah

Winnicki for a study on Grasshopper Sparrows in the Flint Hills.

Bulletin:

Gene had no further report beyond what was presented in the general membership meeting.

Horned Lark:

Chuck indicated that he had had a couple of people indicate possible interest in taking over the Horned Lark Editor position. He will visit with them more. There ensued a discussion of having a paid versus volunteer editor; do we need to have an editor only or an editor and a layout person. The possibility of going to an electronic only newsletter was discussed which prompted the question of what do our members receive for their dues as well as the challenges of keeping it available for members only. This then evolved into a discussion of organization maintenance. No action was taken on any of these items.

Business Manager:

Lisa discussed that a ball cap design was needed. There was then discussion of whether we needed a new ball cap. Rob will look for some possible artwork for a new ball cap.

Upcoming meetings:

Spring Meeting will be May 6 – 8 at

Camp Horizon. Max has most of the details already worked out. Fall 2016 Meeting will be in Garden City. Art Nonhof is working on setting a date and other arrangements. There was a general discussion of future locations with no specifics coming forward.

KBRC:

Gene discussed whether we needed to print another checklist or just make it available on the website and individuals could print their own checklists if they wanted one.

Other Business:

Max discussed the need to get started on organizing a second round of data collection for the Kansas Breeding Bird Atlas. The first round of data collection was in 1992 – 1997. At a 25 year interval between data collection rounds we would need to start again in 2017. Matt appointed a KBBAT committee to start looking at this: Chuck Otte will chair with other members being Max Thompson, Rob Penner, Kevin Groeneweg and Matt Gearheart. Chuck indicated that he would put a short article in the next newsletter to start to create awareness of what a breeding bird atlas is.

Chuck moved to adjourn the meeting. The motion was seconded and passed. Matt adjourned the meeting at 1:00 p.m.

What is a Breeding Bird Atlas?

In the coming months you will start to hear more and more about upcoming work on the second round of a Kansas Breeding Bird Atlas (KBBAT). Briefly, a breeding bird atlas is an attempt to census a specified block of area to determine what birds are probably or definitely breeding there.

The first KBBAT was performed in the mid 1990s with data collection (field work) from 1992 - 1997. Dr. John Zimmerman and Bill Busby collected and processed all the data from the first round of data collection

and *Kansas Breeding Bird Atlas* was published in 2001. It is generally felt that rounds of data collection should be done in 20 to 25 year increments meaning that it is about time to get started.

John Zimmerman once described the field work as switching from bird watching to watching birds. The KOS Board has appointed a committee to get the process started. Field work requires a lot of birders in the field and YOU will be needed. Stay tuned for more information and additional updates!

Top 5 Secrets to Birding in Southwest Kansas (Part II)

by Jeff Calhoun

3) Go Into Town

The third secret to birding in southwest Kansas? If you want to check the largest diversity of birds off your list, you should always visit... town? In the Great American Desert of southwest Kansas, absolutely! Cities of all sizes are often the only places with multiple trees planted together in the unforgiving and desolate landscape, and as such are an oasis to several unique species of birds. During the peak of songbird migration, the towns are the largest “forests” seen for hundreds of miles by birds flying overhead. If the conditions are right, a birder can find dozens of species of warblers, vireos, flycatchers, grosbeaks, and orioles in the middle of the largest towns of southwest Kansas in a single morning. Of course, even the casual observer may comment at the multitude of Collared-Doves, Western Kingbirds, and Great-tailed Grackles, and you may even notice how odd it is that nearly every single town has scores of Turkey Vultures roosting on the water tower every night spring through fall. They love the city life!

Some of the best places to spend time are at city parks because nearly every town has one. They often have the largest and most densely planted trees. City parks in Ashland, Meade, Sublette, Johnson City, Deerfield, and Kinsley (to name a few) are great places to find both migrant and resident birds. In Garden City, the superb Lee Richardson Zoo is a fun place to see animals, of course, but the wild birds flock there as well. Several locals otherwise not interested in the outdoors can usually show you to the nesting Black-crowned Night-Herons! Finally, some cities, notably Elkhart, Jetmore, and Garden City, have large cemeteries with mature trees. These can be alive with birds and wildlife, and the juniper and pine trees are attractive to birds wandering down from the Rocky Mountains like the Red-breasted Nuthatch or rarities like Red Crossbills. Fort’s Cedar View

Bed & Breakfast in Ulysses is a fun place to stay for the person seeking nature in southwest Kansas. In addition to the spectacular breakfast and accommodations you can walk the property and see the nesting Great Horned Owls. In the winter you have a chance to see some of the rarities that occur there, including Western Scrub-Jay or Curve-billed Thrasher.

Perhaps one of the of the most exciting wildlife events in the towns of southwest Kansas, though, centers around the smallest birds, hummingbirds. Southwest Kansas is the most exciting place in the state to observe their late summer and fall migration! Believe it or not, five different species of hummingbirds regularly occur in this part of the state, and this annual passage is most easily observed in towns. Larned, Dodge City, Garden City, Satanta, and Elkhart are renowned by birders for their hummingbird migrations. Most municipalities in this part of the state have gardens or birdfeeders that may be attractive to a passing hummingbird. In southwest Kansas it is always a thrill to see a hummingbird and a tempting puzzle to determine which species it is.

The wildlife flocks to humans in southwest Kansas it seems. Taking the time to stop in town is always sensible. You have to get gas somewhere, anyways!

2) Take Me To the Beach

Playa lakes are the second secret to birding in southwest Kansas. Many people, even those who have lived around them for the entire lives, have never heard of them. Playa is the Spanish word for beach/shore. Playa lakes, also known as mudholes or buffalo wallows, are critical wildlife habitat and, when they exist, produce some of the most exciting birding in the entire state. They are usually small and shallow natural wetlands that serve as recharge and purification zones for the Ogallala Aquifer in the High Plains. In southwest Kansas, many playas hold water once every ten years or more,

adding to the thrill of the experience. Many playas are along rural roads in agricultural areas although there are a few lesser known public areas with playas, including Wild Turkey, Stein, and Herron Playa Wildlife Areas in Ford County. No matter where you find a playa, you are sure to find wildlife nearby!

In migration more than twenty species of shorebirds may be utilizing them as a stopover on their lengthy migration. As the shorebirds phase out, extensive flocks of waterfowl and geese move in to spend the winter. Huge flocks of Black Terns comically, yet elegantly, feed for insects in late spring and early fall, and Sandhill Cranes use them as a safe place to rest. When playas begin holding water for longer periods of time, the amphibians come alive. The Black-crowned Night-Herons, White-faced Ibis, and other wading birds arrive to take advantage of the feast. In early September, one of the greatest, yet most unfamiliar, wildlife spectacles takes center stage at playas across southwest Kansas when hundreds of migrating Swainson's Hawks visit them in large flocks. Seeing these kettles composed of hundreds, sometimes thousands, of majestic looking raptors on the ground and in the airspace around a small playa is a sight not soon forgotten! So much wildlife can be found around an active playa that it is worthwhile to enjoy in areas that have endured rainy seasons. Many can be appreciated easily from a public road, but most are only known by the locals or the explorers who seek them out.

1) Attend the Late Show

You often hear that you should be out unpleasantly early for the best birding. While there are great things to see at dawn in southwest Kansas, some could argue that the best show here cranks up at dusk! The best kept secret in southwest Kansas birding and wildlife viewing is that that the evening spectacle is just as good, if not better, as the one at dawn. Firstly, the sunsets in southwest Kansas are awe-inspiring by themselves. When you start taking note of the wildlife that is also part of the show, you truly have a Zen-type experience! In southwest Kansas, CRP grasslands along any quiet county road are the premier place to enjoy it.

At any season you are likely to see or hear coyotes, jackrabbits, white-tail and mule deer, and perhaps a cackling pheasant or a gobbling Wild Turkey. If you're lucky and have a quick eye, you may see my favorite critter, kangaroo rats, hopping across the road in distinct fashion in sandy areas. In winter you can watch the changing of the guards on the prairie. As the Northern Harriers and other hawks go to roost, the Short-eared and Barn Owls begin to cruise the fields to hunt rodents on the night shift. Keep an eye to the skies for the abundant ducks, geese, blackbirds (by the thousands), and other birds flying to a roost.

In the spring and summer, the show takes on a different feel. The sound of a distant prairie-chicken lek is sure to make you chuckle if you've never heard the pops or gobbles before. Bird song intensifies throughout spring, peaking in late May and June, and a variety of snakes, lizards, turtles, and frogs begin crossing these roads at these late twilight hours. In summer Common Nighthawks zip overhead with strong wingbeats. Many prairie birds found here have adapted displays as a way to stand out on the treeless plains. Birds like the Cassin's Sparrow and Lark Bunting sing their most beautiful melodies while flying high into the air and fluttering slowly back to Earth, a display called a skylark. The skylarking is most often seen and heard at or around dusk, and it continues into the night, especially when the moon is bright. The abundant meadowlarks and Grasshopper Sparrows are drab in appearance, but their lovely songs add to the perfection of a summer sunset on the prairie.

By autumn, the hawks appear again and bird song halts, but the crisp air paired with the colors of the season make for some of the finest sunsets of the year. Sandhill Cranes migrating over Kansas often stop in the southwest and the trumpeting of a large flock over the Kansas prairie at dusk is sure to inspire. After experiencing this best secret of southwest Kansas birding, you are in one of the best places in the state to gaze at the stars. It doesn't get better than this!

To enjoy Jeff's complete article including all the photos we didn't have room for here, please go to: <http://birdinginkansas.com/SWKansas.pdf>

