

Prairie Mings

Winter 2016 - Spring 2017



MESSAGE FROM THE CHAIR

As I write this we are in a season of change. Fall has initiated its glorious color spectrum in tree leaves. My garden is transforming from fruits - tomatoes, eggplant, sweet peppers and melons - to leafy greens - green and maroon chard, purple Chinese cabbage, kale and ruby-tinged lettuce. My mules are slowly putting on their fuzzy coats. And by the time you read this, the nation will have elected a new President.

This issue of *Prairie Wings* also represents a change. This is the first issue of *Prairie Wings* published by Audubon of Kansas Trustees. Board Trustees Dick Seaton, Joyce Wolf, Elizabeth Schultz, Bill Browning and his wife Jennifer, led by Michael Donnelly crafted this issue from the solid foundation of past work Audubon of Kansas Executive Director Ron Klataske has created. New features include a tear-out children's section and increased variety of contents including poetry and nature essays. I appreciate the effort this group has put forth and the challenges they faced in delivering this edition.

The Board of Audubon of Kansas is composed of respected individuals with tremendous talents, extending well beyond visual and auditory identification of birds in fields and woods. We will welcome one of these members as our new Board Chair at our next meeting. New members of the Board of Trustees John Head, Mike Corn, and Lucia Johnson have added their talents to our leadership cadre. I have appreciated the experience of serving as Chair of this group for the past 3 years and look forward to new leadership for the organization. The past year has seen important new initiatives for Audubon of Kansas. Ron Klataske as Executive Director and Monica Goss as our recently added Development Director continue their outstanding devotion of time and effort to the cause of conservation in Kansas and the heartland. A committee headed by Joyce Wolf conceived and ran our first major conference, the Silent Spring Conference on nicotinoid threats to birds and other pollinators, as well as updates on other conservation activities in Kansas. A series of gatherings for eager birders-to-be and experienced birders, the weekend Birds and Breakfast outings, have been started in Lawrence and Shawnee Mission. With our expanded scope and new initiatives have come new financial challenges, which we hope our heightened profile in Kansas conservation will help to answer.

We welcome your feedback, along with your support of Audubon of Kansas' mission to promote appreciation and stewardship of birds, wildlife, prairies and other habitats in Kansas and the heartland.

-Lisa Stickler, Chair of AOK

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"It's a big world out there!"

When a farmer informed AOK honorary trustee Glenn Chambers of a coyote den and its sheep-killing attendant, Glenn sprang into action. After probing the swale side lair to establish its dimensions, he dug a man-sized hole just beyond its upper reaches. After climbing in, he scraped a camera lens-shaped opening from his position into the den and snapped away. By the next morning, the five one-third grown pups had all been moved to a neighboring farm.

Prairie Wings is a publication of Audubon of Kansas, Inc. - the only widely distributed magazine devoted specifically to statewide conservation and wildlife advocacy initiatives. It is made possible by your generous support and contributions. We encourage you to share the publication with friends, family, and other organizations. Please feel free to leave copies in reception areas, hospitals, and other business locations to help spread awareness about critical wildlife issues.

Sustain AOK and *Prairie Wings* **today!** Please consider becoming a sustaining member by signing up for monthly giving at audubonofkansas.org. This is convenient and secure for you, and helps us to stabilize our operations all year long. By giving a gift membership and/or contributing to the vital work of Audubon of Kansas, you can help promote the appreciation and proper stewardship of our natural world.

Ensure the future of AOK and *Prairie Wings*! Legacy Gifts ensure the future success of AOK and the continuation of important initiatives such as *Prairie Wings*! AOK gratefully accepts gifts in the form of stocks, bonds, charitable gift annuities, trusts, and bequests, as well as assets to be sold such as: gifts of land, real estate, and vehicles. Gifts of land to be preserved as wildlife sanctuaries require an adequate endowment to fund future operations and taxes; property must meet requirements stated in AOK's property acceptance policy.

To learn more about AOK or ways to support our mission, please contact us at **785-537-4385** or **aok@audubonofkansas.org**. Audubon of Kansas, Inc. is an independent 501(c)(3) organization that is neither administered nor funded by the National Audubon Society. Contributions are fully tax-deductible to the extent allowable by the IRS. Contributions can be sent to our state office: 210 Southwind Place, Manhattan, KS 66503

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"Thanks to the Kyners, we had 2
wonderful days at the Nebraska
Hutton Wildlife Sanctuary ranch
house! Thank You!"
~ Stan and Janet Roth

"In honor of Ken Ervin's tireless effort supporting and improving Parsons Arboretum, The Iron Horse Museum, and the City of Parsons in general." ~ Rick and Jane Tucker "In honor of my Pride and Herd: Leo, Skitty, Pablo, GC, Mickey, Squeaky, Coco, and Maggio!" ~Lisa Stickler

Special acknowledgment for the support of this issue goes to Richard and Martha Seaton & Dr. Dan & Martha Housholder.

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	About the contributors: Lisa Stickler is a licensed professional engineer, focusing on building energy efficiency and energy conservation for the past 20 years. She joined AOK as a Trustee in 2012 and has served as Board Chair since 2014. One of her many interests is gardening for her own sustenance a well as the wildlife visiting her property in rural Bucyrus.	
	Monica G. Goss, Philanthropy and Development Director, has been with Audubon of Kansas for two years. She is devoted to helping AOK secure resources in order to continue to fulfill it's mission to advocate for and protec	it.
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	More contributors information at end of their first article.	
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	Photo by ©Wayne Rhodus	N. Comments



The Mission of Audubon of Kansas includes promoting the enjoyment,understanding, protection, and restoration of natural ecosystems. We seek to establish a culture of conservation and an environmental ethic.

Prairie Wings ia a publication of Audubon of Kansas, Inc. Additional newsletters and AOK E-News are published periodically. See our website at www.audubonofkansas.org and www.niobrarasanctuary.org.

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THE ANDERSON CREEK FIRE

BILL BROWNING & JENNIFER BROWNING



THE ANDERSON CREEK WILDFIRE IN LATE MARCH CONSUMED 400,000

s part of its permanent masthead *The Gyp Hill Premier*, Medicine Lodge's weekly newspaper, has a photo that says it all: steep red hills, deep canyons and thousands of mature cedars all over the landscape.

The Anderson Creek wildfire in late March this year consumed 400,000 acres of this landscape, the largest fire in Kansas history. It caused terrible damage to buildings, fences, and livestock, but simultaneously put a big hit on the area's number one ecosystem threat - Eastern Red Cedars. It is now up to local ranchers to build on this progress. If they do not, the same scenario will play out over and over. Indeed, the last two large fires—100,000 acres in 1966 and again in 2008—were poorly capitalized on, and the landscape had mostly reverted to its previous appearance.

The Anderson Creek fire began March 22 in Oklahoma. Its origin is still unknown, but it quickly spread to Comanche and then Barber Counties in Kansas. Control took five days. The fire took out infrastructure, burning out cell-tower huts and degrading communications so important to the fire fighters; it also destroyed wooden bridges, miles of hedge-post fences, barns, outbuildings and two occupied homes. The county jail, hospital, and many Medicine Lodge citizens evacuated. A wind shift when the fire had approached to within a mile of the city providentially saved Medicine Lodge.

The fire was driven by winds of 40 to 50 miles per hour, very low humidity and arid ground conditions. But it was greatly intensified by the cedars. Flames soaring 40 feet in dense cedar stands carried burning embers that witnesses reported travelling hundreds of yards, setting numerous fire metastases out in front of a thirty-mile-wide headfire. At one point after the fire breeched their line, an entire fleet of fire trucks and men raced 12 miles to get ahead of it, but while they were en route, the fire had already burned six miles and gotten ahead of them again. Many fire crews went from one homestead to another, simply trying to save structures. It was reported that at one point part of the headfire traveled a mile in four minutes.

One fireman spoke of the terror he experienced when visibility fell to near zero while the cab of his truck began to heat up as the fire approached and of crossing a wooden bridge that was gone three hours later, forcing a cross-country retreat.

As many as 500 cattle died, many apparently trapped against fences as the fire raced toward them. More that had suffered severe burns externally or to their lungs were sent to slaughter. The heat caused melting of some cows' eyeballs, singed udders and melted plastic ear tags. All these casualties were from cow-calf herds; although the area also does major grazing for yearling cattle, in March none of these were yet on site.

Simultaneously something mind boggling occurred on a ranch where Bison were being grazed. The Bison all went to prairiedog towns, standing in the short-cropped vegetation as the fire swept past, except for three trapped in a pen, they all survived! (An atavistic behavior inherited from the days when fires set by lightning strikes threatened the giant herds that ranged the prairies, but prairie-dog towns were a common landscape feature?)

Other wildlife impacts included dead coyotes and deer, and a large number of porcupines and squirrels that climbed trees to get out of the fire. Bad strategy. Possums, skunks, and raccoons were gone. Deer and turkeys wandered about looking for some kind of forage. At least one rancher put out feed for wildlife.

The following days after the fire it was eerily quiet: no birds. Dust devils were black. Soot and red dust from exposed ground covered everything in the remaining homes. Hundreds of miles of barbed wire lay on the ground. There was no forage for the cattle. Stored individual large, round bales reportedly had burned in less than two minutes.

But in the midst of all this destruction was opportunity. For generations stigma has been attached to cutting down trees in this part of Kansas where trees were once scarce and mostly grew only along perennial streams. Government agencies once preached tree conservation, and settlers advised their descendants "not to cut down a tree for any reason." Added to this mindset is the difficulty of burning in the Red Hills versus the Flint Hills. Ranchers who plan to burn in Barber County must buy insurance that might cost 250 dollars. Each burn requires a large team: four tank-truck drivers, four hose handlers, one to set the fire and a burn captain. The wind needs to be at least five mph or the fire won't carry in the more sparsely vegetated gyp hills, and local regulations dictate that more than 15 mph is too risky. Humidity is a significant parameter as well. If it is less than 15%, the fire could escape. If it is more than 40%, the fire won't be hot enough to kill small cedars.

With all these conditions to meet, it is striking that there are any prescribed burns in the Red Hills. But several progressive ranchers are pursuing this tactic. Imagine how thrilling it was for these few to have their homes saved, but also to have thousands of acres of cedars destroyed.

Why are cedars so bad? Their population explosion in the last 50 years has been compared to a "green glacier" slowly crushing everything in its path. Fifty years ago, an area native related, it was a project to find an appropriate cedar for a Christmas tree. At that time cedars in Kansas numbered in the tens of thousands. Today the estimate is 100 million. Oklahoma might have 500 million. *The Wichita Eagle* reported:

) ACRES OF THIS LANDSCAPE, THE LARGEST FIRE IN KANSAS HISTORY.

"They say it's not just how many of them there are, but it's the oily explosive insides, the greedy roots that suck up gallons of water a day and leave streams dry and the dark shadow its pine limbs cast on the ground, not letting sunlight or water through, leaving a largely deadened area underneath... [Cedars] have pushed out native grasses and reduced pastureland by thousands of acres."

All this is why one rancher was excited that the fire had taken care of ten years of prescribed burns. And even with prescribed burns, conditions of low wind and excessive humidity prevent the eradication of the larger cedars. This fire killed them as well. A Natural Resources Conservation Services technician reported another encouraging likelihood. The fires of 1966 and 2008 burned hot enough to destroy the seed bank of cedar berries. This fire should prove their equal.

So what finally are the opportunities and risks presented by the Anderson Creek fire? The risk is failing to learn the lesson of the problems presented by the proliferation of cedars. The opportunity is the chance to mop up the remaining cedar seed sources. A drive through the burned area in mid-June revealed a beautiful

resurgent prairie over vast areas but also numerous pockets of various sizes-from—one isolated surviving cedar to hundreds skipped by the fire, mostly in canyons and on hilltops. So the most important thing, and time is of the essence, is to go after these last trees. Perhaps the best time and method would have been using fire last spring when the surviving pockets were surrounded by blackened acres. But I doubt there was much appetite for more fire then. However, there is still time – through assiduous application of prescribed burns and the chain saw – to restore to the Gyp Hills their original balanced ecosystem as it existed fifty-years-ago and more.

Resources used to prepare for this article included interviews with Barber county NRCS employees, an interview with *Premiere* reporter Doris Sory, *The Kansas City Star* articles



March 28 and May 28, *The Wichita Eagle* April 17, *The Gyp Hills Premiere* article March 28, Steve Clubine article in the summer 2016 edition of *The Missouri Prairie Journal*, and a drive through the burned Gyp Hills on June 16, 2016.

About the contributors: Bill and Jennifer Browning recently retired from their medical practice of 37 years in Madison, Kansas. They operate a family ranch in the Flint Hills west of Madison. Both have been very active in conservation for many years. Bill is a Chair Emeritus of AOK.

The Sandhill Cranes Touch the Earth

Mary M. McCoy Photo Jay Dee Miller

The Platte River

is wide in this place. It almost resembles its former mile-wide-inch-deep self that was described in the old journals. Sandbars are scattered about, sloping shallowly into the cold current. Grasses, ochre and dove-gray, clump near the edge of the water, and dark leafless trees cluster farther away. Clouds are blown along swiftly by the March wind. It is dusk, and it is cold here in the Sandhill region of south-central Nebraska.

Late in the day I join others at the Rowe Sanctuary in a blind on the edge of the Platte River. This simple wooden building has open windows facing the water and the fast-sinking sun. Twenty of us are here, hushed, making few sounds except for the mechanical noises caused from adjusting cameras and tripods and binoculars. The last rays of the sun shine in our eyes as we scan the horizon. There is an energy in this enclosure, almost palpable, fueled by great anticipation but constrained within our quiet selves, as if held in by our down jackets and insulated boots.

Someone murmurs a sound, unintelligible but recognized by everyone: the first wave of Sandhill Cranes has

been spotted approaching the river. They are flying in from surrounding cornfields, where they have been feeding on scattered waste corn. They will roost densely on the river this night, seeking its protection from predators. The sky is pink and leaden gray in layers, and in such light the incoming cranes look like another long low cloud just above the horizon. This cloud moves closer, though, and increases in height, and individual birds become visible, flying wing-tip to wing-tip. And now the crane calls are heard: throaty chortling sounds, family signaling to family, the mass signaling to the mass. Several people gasp quietly, as if in response. Just now, below this approaching band, a second line of birds becomes visible farther back: one more long narrow black cloud. The first group starts landing on the river, slate-gray bodies shining in the reflected light, legs dropping beneath them as they glide to the sandbars. Cameras click rapidly and insistently, but some people just watch, absorbing. The birds' calls become louder. Now a third dark thread appears beneath the second one. As the horizon closes toward the bright ball of sun, orange and red suffuse the sky and reflect on the water. The black line of trees mirrors the many lines of birds now

approaching. More cranes land on the sandbars and shoulder about for room. They land ever closer to the blind, and their calls pervade and overwhelm. We can now see their earth-hued plumage. Some fly directly overhead, necks stretched forward, long legs trailing languidly, and six-foot wings extended with primary feathers spread like fingers embracing the earth. Some of us inhale sharply, one shows tears. High overhead, one group of cranes begins a descent in a spiraling helical line, reflecting the very DNA that we all share. I gasp at this sight. The sky is now indigo, and wave after wave of birds descend, jostling for ever-limited space. Then the numbers of incoming birds diminish, and the crowded masses before us begin to quiet. The sky has turned black, a full moon has risen, the birds are silent, and we softly leave, uttering nothing. I pick my way carefully along the trail in the moonlight: depleted, joyous, transformed.

How could our reactions be otherwise? Such vast numbers of cranes—600,000, the largest grouping of cranes in the world—move through this narrow, 80-mile stretch of the Platte. Such a long arduous flight is demanded in their migration from the Gulf of Mexico to Canada and even to Siberia, and back again within the year. Such touching family bonds are revealed to us by these cranes: their balletic courtship dances, their pairing for life, their coaxing of tiny chicks to full height so they can return south within only a few months. Such ancient lineage prevails. Such a tenuous grasp is held on the survival of their species in this world of

diminishing water and wild space. Such indecipherable beauty emanates from their very existence.

A little distance upstream the river's broad expanse narrows, pushed inward by encroaching grasses and shrubs. It deepens, and there are no sandbars. Not far downstream the river again narrows and deepens, unable to withstand the insistent succession of plants. In the past, before the 15 dams were built on the Platte, the torrent of snow melt from the Rockies washed away those plants that might catch hold and impede the river's flow. But now the dams intrude, and the plants invade, and the river narrows, and the birds cannot roost in these places. And so the water flow diminishes, sometimes to nothing.

Yet now, in this particular part of the Platte, the river has been coaxed back to its old wide and shallow sandbar-laden state. It has been dredged and disked and weeded and protected by caring people who know these birds, who tend their river sanctuary, and who wait for their return next year. Many of us will migrate back here too, to be brought closer to the cranes and to each other. We gravity-bound creatures will reach out to the cranes again, as they touch the earth.

About the contributor: Mary M. McCoy is retired from teaching biology, with a special focus on entomology, at Washburn University. Living in Lawrence, she is engaged in writing about her experiences with insects and with a diversity of other creatures in our environment.

"Silent Spring 2016: Threats to Birds, Bees and Other Wildlife."

Buyer Beware!" Those words from Mary Powell's article in a previous issue of Prairie Wings struck a nerve with me. Before that, I had been purchasing bedding plants without first checking to see if they had been treated with neonicotinoids - a group of chemicals that is now thought to be a leading cause of Colony Collapse Disorder (CCD) in bees. And only later, when I found out about the toxic effect of neonics on pollinators and began checking labels on bedding plants, did I realize that American consumers are being misled. When a plant is labeled it has been treated with neonics - the back side of that label says "approved by the EPA!" Uninformed with no knowledge to the contrary, I assume that most buyers would see these

labels and make their purchase, thinking that such an "approval" must mean that the plants are safe to use, and thus mistakenly believe they were helping bees and other pollinators.

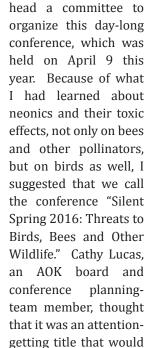
Meanwhile, I had the opportunity to hear presentation Douglas W. Tallamy, the author of "Bringing Nature Home: How You Can Sustain Wildlife with Native Plants." in which he describes the absolute dependence on the availability of

caterpillars for nesting success of most songbird species. Tallamy had actually documented that a single clutch of nestlings were fed 7,000 caterpillars from the time of hatching to when they were able to feed on their own. So I have come to say: "If you like birds, you also need to like caterpillars!" For it is the high-protein and fat content of these bugs-to-be that provides the essential building blocks for early growth. And I no longer groan when I see leaves with lots of holes in my gardens - for I have come to learn that this means the birds are being well fed.

Then I had the pleasure of hearing Ann Birney's historical performance of Rachel Carson for Jayhawk Audubon Society's 45th anniversary celebration in the spring of 2015. That led me

to read a comprehensive biography of Carson by Linda Lear, which I highly recommend to anyone wanting to know more about this amazing lady of science-based environmentalism. I believe Ms. Carson would be disappointed that the Environmental Protection Agency, which came into being after her research, analysis and advocacy on the dangers of pesticides (which she correctly called biocides) now seems to have been silenced as the agency designated to protect the environment from harm.

A big part of AOK's mission has been education. In 2015, we decided to address this need in 2016. I volunteered to





attract more people, which I believe was a correct assessment. Although registrations lagged at first, we had 130 persons from across Kansas attend. Cathy also offered examples of evaluation forms from other conferences that she had attended that we could adapt for our own purposes.

But the underlying theme of the conference was to offer solutions: "what each of us can do to offset those threats to wildlife in our yards, gardens and farms." Try as she might, Evelyn Davis, another conference planner, was unable to find an appropriate venue in Topeka – more than a year in advance! Lawrence became the next choice, and although the convention center was being renovated, it turned out to be an acceptable location.



Ed an Sil Pembleton leading an education session

Monica Goss, AOK's Director of Development, tapped into a very helpful resource – Johnson County Community College students who put their graphic-design skills into practice by providing fantastic designs for website and printed materials, while gaining class credit for their efforts. We are very grateful to Nancy Schneider for allowing her students to participate in this venture. Mary Powell, also on the planning team, graciously arranged to underwrite the charges of another graphic designer, Janet Faust, who had also created materials for the Kansas Children's Discovery Center. She furnished AOK with layouts for the conference's program and other materials for inclusion in attendee's packets. Team members also benefited from the significant expertise and advice of Lucia Johnson, who had planned several conferences for the American Society for Clinical Laboratory Science.

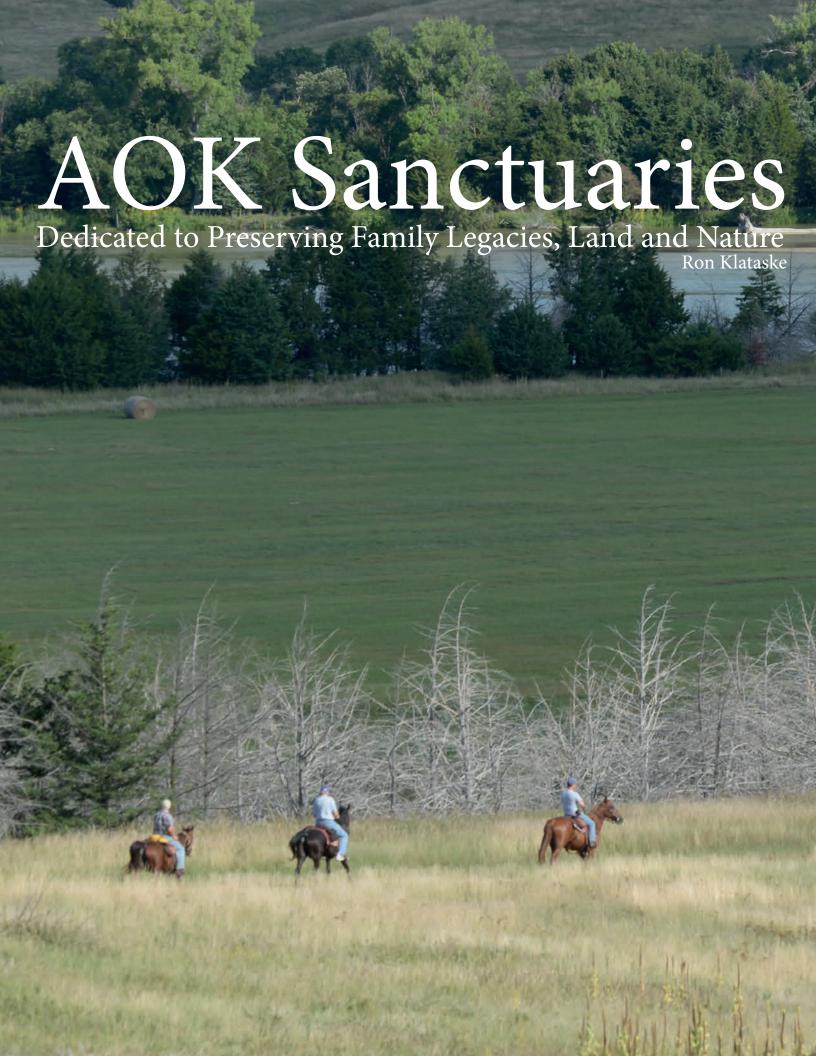
Beth Schultz, another team member, put her University of Kansas contacts in gear and soon we had several of the conference programs: the video: "When the Well Runs Dry" by Stephen Lerner, with commentary by Tom Averill and Matt Sanderson; and our keynote speaker, Dr. Leonard Krishtalka. They along with Jennifer Hopwood from the Xerces Society, educators Sil and Ed Pembleton, and prairie restoration practitioners, Jeff Hansen, Peggy Schultz, and Jim Weaver, provided hints on making our yards and farms more wildlife friendly, thereby imparting a sense of hope for the future of pollinators. Paul Johnson gave legislative updates regarding conservation issues. Kathy Roccaforte Dening shared results of her research on native bees at several prairies. AOK's own Ron Klataske and Randy Rathbun, along with John Hughes and Matt Bergles, offered a summary of the final outcome of the prairie-dog wars. Kansas courts decided that poisoning Prairie-Dogs under the Kansas Prairie-Dog eradication statute conflicted with issues of protection of the Black-footed Ferret under the Endangered Species Act (ESA). The ESA was found to preempt the state statute and ultimately the Board of County Commissioners of Logan County was permanently enjoined from eradicating prairie dogs on the ranchland.

The committee is most grateful to our co-sponsors who provided informational materials for each of the attendee's registration packets. A majority of evaluation responses were very positive except about time keeping. We got behind early in the day and found it hard to catch up. One reason was the enthusiastic Q-and-A sessions after presentations. All comments will be considered carefully when planning for the next conference. The overwhelmingly positive and enthusiastic responses were appreciated and will provide ample incentives for the next planning team.

This article was written in collaboration with conference planners: Evelyn Davis, Cathy Lucas, Mary Powell, and Beth Schultz, with editorial assistance from Craig Yorke. Photographer, Mark Neubrand.



About the contributor: Joyce Wolf served as Audubon's lobbyist during the Cheyenne Bottoms lawsuit. She served on the National Audubon Society board of directors for six years; active in water issues, she currently is secretary of AOK and program chair for the Jayhawk Audubon Society in Lawrence, Kansas. In her spare time she enjoys gardening and quilting.





The Hutton Niobrara Ranch Wildlife Sanctuary – This place is incredible, even during a warm evening in August or the morning after a fresh snow in February. At dusk in late August we stopped on the main sanctuary road as a covey of nineteen Bobwhite Quail walked up the track to within a few feet of our vehicle and then flew out into the adjacent field of tall Indiangrass to roost. On up the two-track county road closer to the Hutton Guesthouse two Mule Deer does stood with two cute fawns. The following evening, before another beautiful August sunset, the same route produced a brood of twelve Sharp-tailed Grouse and a flock of Nighthawks working their way south.

A Burrowing Owl was perched atop a mound checking out our

small prairie-dog colony in the morning, and a crowded yet-to-fledge brood of Barn Swallows remained in a nest in the old barn. In mid-August there were at least forty swallows hanging out on the electric wires, but most left their post in the previous ten days. The barn's main purpose is to provide for Barn Swallows. With about twenty-five active nests during the peak of the breeding season, it makes an impressive contribution. It is too bad that so many old buildings are razed just because people do not reflect on or consider the diversity of wildlife that utilize the habitat provided by overgrown farmsteads.

It is inspiring to stay a few days at the Hutton Guesthouse or the Lazy Easy Ranch Guesthouse and experience wildlife, expanses of prairie and wooded canyons, a succession of wildflowers and all of nature at different times of the day and year, under varying kinds of weather. Discovering a night's worth of animal activities recorded in fresh snow can be one of the most memorable experiences. We think of the 5,000-acre Hutton Niobrara Ranch Wildlife Sanctuary as a sanctuary for wildlife and people!

Our brightest guiding light for stewardship is to honor the detailed vision that Harold Hutton expressed many times to me—a vision that the property become a wildlife sanctuary and an inspiration for others. We have continued his legacy and made dramatic steps toward his goal of restoring the native prairie-plant communities within all of the rangelands. Following a period of years when a tenant imposed intensive grazing pressure, one couldn't hide a golf ball in most areas. Now Sharp-tailed Grouse and other grassland birds can hide almost everywhere. We have removed thousands of invasive cedars from several thousand acres of native grassland, with special thanks to the U.S. Fish and Wildlife Service and the USDA Natural Resources Conservation Service for their assistance.

An upland-watering system and exclusion fencing also keep cattle from adversely impacting aquatic life and riparian habitat of Willow and Rock creeks.

The wet meadows and wetlands in the bottomland along the Niobrara River are phenomenal. Because Bobolinks nest in the wet meadows, we delay hay harvesting until after they have fledged young in mid July. A pair of Sandhill Cranes has been nesting in the wetlands and bing their young chicks out to forage in the wet meadows. They are apparently the first Sandhill Cranes to nest along the Niobrara since the valley was homesteaded.

The Hutton family homestead site is nestled in a Bur Oak grove along a spring-fed stream that waters the adjacent wetland. Secretive Ovenbirds nest in the native woodlands along the slopes and back into the canyons. American Redstarts and Scarlet



AS MANY AS 25 PAIR OF BARN SWALLOWS NEST IN THE OLD BARN BEHIND THE HUTTON GUESTHOUSE.

Tanagers are occasionally seen and they provide another glimpse of colorful birds that connect the property to the tropics of Central and northern South America.

We are in the process of stabilizing and restoring Harold Hutton's childhood home so it will be maintained pretty much like it was when the Hutton family lived there. It will serve as a day shelter for visitors to the northern part of the sanctuary, including those walking the trail system we have developed, and as a place from which to view and enjoy wildlife. It also provides a historical "sense of place," reflective of early settlement, that adds another dimension for educational purposes.

An advisory committee, consisting of Nebraska friends of the sanctuary and other AOK trustees, has reinforced our commitment to all of the stewardship goals we have implemented. Most of our management objectives are immediately endorsed, but others take a bit longer—maybe even a generation. Reestablishment of a modest Black-tailed Prairie Dog colony for ecological, scientific and educational purposes required steadfast dedication. Claims that the relocated prairie dogs would disperse and cause problems for others have not materialized.

Native grasses and forbs have been reestablished on 200 acres of previously cultivated fields. Pollinator habitat was specifically planted to 30 acres and more is planned. It is exceptional as nesting and brood habitat for prairie grouse and quail.

We've undertaken an ambitious effort to thin invasive red cedars that threaten to overwhelm most vegetation, including other young trees, from within deciduous forests. Harvesting cedars for fence posts and logs is part of the plan.

NEBRASKA LIFE magazine published a spectacularly illustrated feature article on the sanctuary in the May/June edition. Families and small groups of friends, including Audubon chapters, make reservations through the AOK office for retreats at the sanctuary. A group of accomplished photographers have already reserved dates next summer when there is a new moon for sky photography. The website www.niobrarasanctuary.org provides additional detail.



WHITE-TAILED JACKRABBIT BOUNDS ACROSS THE **NIOBRARA SANCTUARY**.



A FIELD PLANTED TO POLLINATOR HABITAT AT **THE CONNIE ACHTERBERG FARM** IN EARLY MAY WAS HIGHLY SUCCESSFUL WITH NATIVE WILDFLOWERS IN FULL BLOOM BY EARLY SEPTEMBER.



The Connie Achterberg 'Wildlife Friendly' Demonstration Farm

– It is a special delight to work with a landowner who has donated a property to become an AOK sanctuary. In 2013 Connie donated the family farm where she lived as a small child in the 1930s and early 40s. She retained a life estate on the productive 240-acre farm near Lincoln, Kansas and continues to lease most of the cropland to a neighboring farmer. However, Connie also wanted to jointly implement conservation practices that demonstrate how a farm can protect natural features and enhance habitat for wildlife.

The natural features include more than a mile of meandering Bullfoot Creek and Horse Creek with considerable woodland acreage with large Bur Oak trees and other species native to the surrounding area in central Kansas. A small 8.74-acre native prairie meadow remains intact, although this needs restoration to repopulate some of the wildflower species that may have perished due to past herbicide applications or other factors. Prescribed

burning is being employed to arrest intrusion of bromegrass. Because few areas remain that haven't been adversely impacted by human activities or invasive plants, restoration is often a required management strategy, but it can be fun and rewarding.

A 2.5-acre part of the meadow was plowed a few years ago. We have decided to turn that plot into something special. In the spring of 2016 we planted it to pollinator habitat. By September it was an impressive field of flowering Maximilian's Sunflowers, Blackeyed Susans and Blue Sage. The following month Goldfinches were harvesting seeds from the sunflowers, and "little brown birds" (unidentified native sparrows) were flittering around under the canopy.

Connie and tenant farmer Ron Buttenhoff planted 26.7 acres of native grass habitat as "filter strips" and "quail buffers" between most of the fields and the wooded stream corridors, and along a



boundary hedgerow in 2007. With that excellent habitat already in place, we decided to extend and diversify those Conservation Reserve Program practices. In 2015 Connie enrolled an additional 7.84 acres in quail buffers. It consists of a 30-foot wide strip along the perimeter of the five cultivated fields. With these new plantings of grasses, forbs and shrubs, the farm is now framed like a painting with a border of habitat. This includes ten shrub thickets of approximately 50 shrubs each. The Chokecherry, American Plum, Sand-hill Plum, Fragrant Sumac and Serviceberry shrubs were planted with volunteer assistance and equipment provided by farmers who have long been family friends. Because much of the naturally occurring habitat on nearby farms has been and/or continues to be eliminated, the dependence of wildlife on this property is readily apparent. Hopefully, that will encourage other landowners to consider establishment of similar habitat.

It is also a neat place to visit and to enjoy the conservation stewardship of a girl who left the farm, but never forgot the joy of wading in the creek, exploring the woods and listening to the birds.

The Mount Mitchell Heritage Prairie – In mid-November when the "Super Moon" was making its brightest appearance since 1948, several Audubon friends from Manhattan traveled to Mt. Mitchell to experience the moonrise. Although it may not qualify as a mountain, it is a prominent prairie hill with public access, associated with our state's cultural history, and a place to enjoy life close to earth and the universe beyond.

Mt. Mitchell is located three miles south of Wamego, and a half-mile east of Highway 99. It consists of 31 acres previously held by the Kansas Historical Society and an additional 15 acres purchased from a neighboring landowner.

Sanctuaries are an integral part of Audubon heritage – The history of several state Audubon organizations, and that of the National Audubon Society as well, were built in many areas on establishment of wildlife sanctuaries. The Massachusetts Audubon

Society, founded in 1896, accepted its first property for this purpose in 1916. Fast-forward a hundred years and the organization has a statewide network of 56 wildlife sanctuaries, with many more properties waiting in the wings. The organization's foundational concept is to have a wildlife sanctuary within about twenty miles of everyone in the state, ideally as places where nature can be explored and appreciated. Many have educational programs, some with centers. Other lands are conserved specifically for their ecological values.

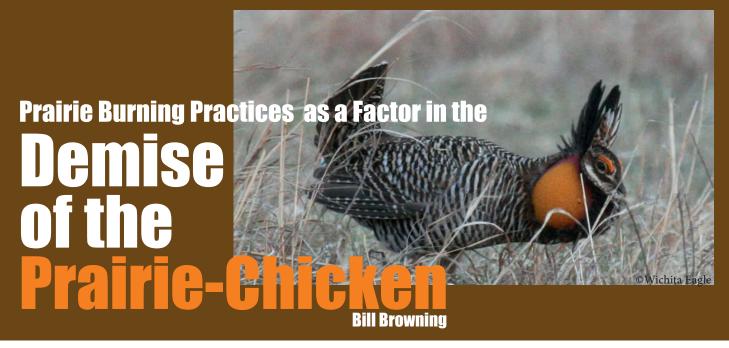
The Lillian Annette Rowe Sanctuary on the Platte River in central Nebraska is the National Audubon Society's signature sanctuary in the Great Plains. As the Society's regional representative I had the

opportunity to acquire most of the land to establish the sanctuary in the 1970s and 80s. With field trips and annual crane festivals since 1971, and in recent years addition of the Iain Nicolson Audubon Center, the migratory staging of Sandhill Cranes along the river has become an attraction for wildlife enthusiasts from every state and many countries. Purchase of the sanctuary was made possible by a bequest from a woman in New Jersey.

It will take Audubon of Kansas, Inc. a while to have a sanctuary system and associated educational programs comparable to those of the long-established state Audubon organizations in New England. However, with a sanctuary system of three unique properties in place, and evaluation of several other properties AOK has been asked to consider, we can envision an impressive network of lands dedicated to conservation in this way.

It is unlikely that the State of Kansas will authorize purchase of much land for public access, conservation or educational purposes in the foreseeable future. Natural features in the landscape are also being lost at an alarming rate due to more intensive agriculture and other developments. With those considerations in mind, it is important that individuals and organizations, including Audubon of Kansas, consider other innovative private initiatives to protect additional lands and make them available for complementary enjoyment and educational opportunities.

About the contributor: Ron Klataske is Executive Director of AOK, and a leading conservation advocate in the Great Plains Region for many years.



A 2011 through 2013 Greater Prairie-Chicken study supported by Kansas State University and the Kansas Department of Wildlife, Parks and Tourism was released in late 2014. The impact of two very different tallgrass prairie land-management systems on this species in decline was the focus of the report.

One management strategy was Patch Burn Grazing (PBG). This is a program in which an alternating third of a pasture is burned each year. Cattle will always prefer the growth that follows the most recent fire. Thus each year the cattle concentrate their grazing on the burned third, while one-third is getting the first year of a twoyear rest, and the final third is getting the second year of a two-year rest. This presents a mosaic with areas of very short vegetation and of taller, denser forage conditions. Generally, these pastures are grazed from mid-April to mid-October. The usual stocking rate is one yearling per four acres.

The other strategy is labeled Intensive Early Stocking with annual Burning (IESB). With this system, the entire pasture is burned every year, and the pasture is grazed from mid-April through mid-July. The usual stocking rate is one yearling per two acres.

PBG is the newer regime. It is utilized on a handful of ranches and on the Tallgrass Preserve at Strong City. IESB has been around for thirty years or so. It was first advocated by rangemanagement professionals at K-State. Uneven grazing of a pasture is always a concern for ranchers hoping to maximize their use of the range. Various pressures drive cattle to dine with considerable discrimination. These include preferences for certain plants and aversion to others (think Sericea lespedeza and Old World Bluestem) but also choices of location. Cattle enjoy a breeze in summer's heat, so they drift south into the prevailing wind or just hang out on the breezier hilltops. They appreciate shade and the nearby water of a stream or pond. They seek the most succulent plants that grow in the deeper riparian soils. Finally, in a pasture that is unburned in a given year, the cattle will graze only the locations that were eaten down in the prior year, preferring the exposed new growth to sticking their noses into last year's stale forage and coming up

with mouths full of mostly dead grass. Thus, these areas are grazed continuously, and through the years they transition to the leastdesirable plant communities while other areas are seldom utilized.



cock Prairie-Chicken banded ready for release ©Wichita Eagle



The older K-State strategy to counteract these tendencies is first to create a level playing field by burning the whole pasture each spring. When this is followed by very heavy stocking known as "double stocking," the cattle eat everywhere. To get enough to eat, they have to. And often by mid-July, the forage is about exhausted. Everything in the cattle business is driven by weight gains, and they are maximized by this system. In spring and early summer, tallgrass prairie plants are at their most nutritious, highest in protein, and yearlings may gain two to three pounds per day. By mid-July as the forage matures, these gains drop off precipitously until the yearlings are gaining little or even just maintaining their weight. Cattle owners love that quick gain and the landowner, if a separate entity, gets in on the bonanza by pasturing more cattle for more money.

Unfortunately the wide acceptance of IESB has coincided with a continuing decline in Greater Prairie-Chicken numbers. The 2011-2013 study was undertaken to determine if this was cause and effect, and if patch-burn grazing was a potential solution.

Before getting into the study results, I am compelled to describe the appearance of the prairie under these strategies. In Intensive Early Stocking with annual Burning, forage plants appear stunted, and looking down into these IESB prairies there is considerable bare ground. Forbs that cattle graze will be nearly absent. Ironweed, an unpalatable forb, will be ascendant.

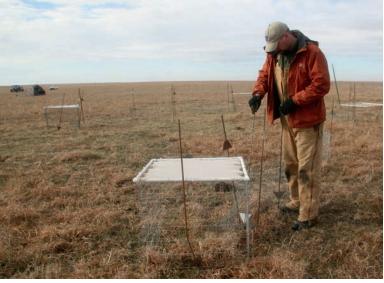
Patch-burned areas by contrast and by design are very heterogeneous and comprised of some short vegetation but mostly taller grasses and forbs. Catclaw Sensitive Briar, Butterfly Milkweed and even the delectable Compass Plant will be much more common in these areas. Like the original native tallgrass prairies, patch-burned prairies present a stunning array of beautiful wildflowers.

The methods and results of the K-State study were as follows: the chickens were trapped on their leks using elaborate chickenwire funnels leading into cages. They were pulled from the cages by hand, taken into a tent, sexed, their age assessed by feather patterns, a blood sample obtained by clipping off the end of a toenail, and an 8-gram antenna radio transmitter and battery device affixed with an elastic necklace harness. Some of these birds must have unavoidably been trapped repeatedly, though recorded and processed only once .

Using handheld radio receivers, technicians tracked the hens daily from a distance until the hens spent much of their time at in one location-the nest, which was then visited by the researchers on foot. The eggs were counted and aged by floating them in lukewarm water. The nest was not revisited until the hen changed her general whereabouts, at which time the nest was checked to see if it was abandoned, destroyed by predators, or successfully pecked open from the inside, not smashed from the outside. Successful hatchlings along with their radio-collared mothers were flushed and counted at 14, 24, 34 and 60 days post-hatch. The investigators postulate that these maneuvers did not affect mortality, though it is reasonable to wonder to what degree human activity around and at the nest site might not attract the attention of terrestrial predators, like coyotes, skunks, and raccoons.

The study concluded that Greater Prairie-Chickens in this study area will die out, with patch-burning only retarding the rapidity of decline.

On the Intensive Early Stocking with annual Burning areas, declines were at 50% per year. Raptors and other predators caused significant damage in these areas of minimal concealment. Even winter mortality was high. In the patch-burned areas, the Traps used ©Wichita Eagle





Bill Browning releasing trapped hen ©Wichita Eagle

conclusion was only slightly less grim. If more ranches were managed this way, the data suggested that the demise of the species would be drawn out over a longer time-frame. Winter mortality and mortality of hens on the nest were much reduced, and if the first nest failed, second nesting was more common.

The study attributes the differences in chicken fecundity under the two prairie-burning treatments to a measurement called Visual Obstruction Reading (VOR). This is a term that refers to how tall and dense the grasses and forbs are. Optimal height for nest concealment is 1-2 feet, maybe best around knee high. The density of the cover should reduce visibility to a few inches. In IESB, this level of VOR represented about 2% of the pasture while PBG had 16% of the required habitat at this level of coverage.

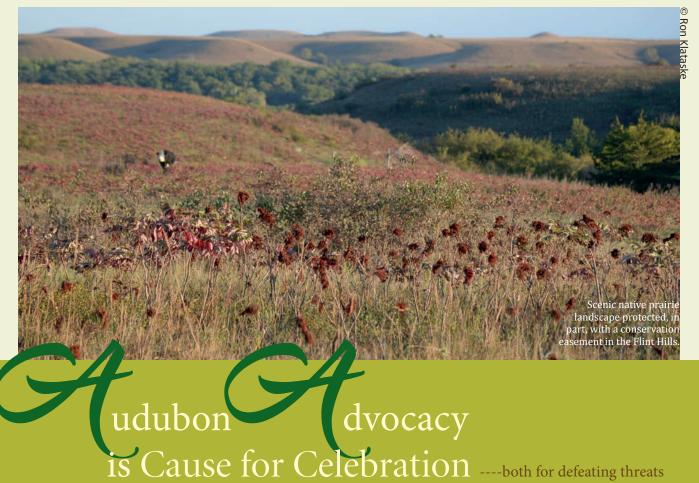
So what are my own conclusions? PBG is better for both flora and fauna. However, it seems to me that this study was flawed: conclusions about the species' demise ignore the possible mortality associated with being studied.¹ Moreover, the study was unexpectedly impacted by drought that severely affected its first two years. The drought not only had direct impact on prairie chicken populations, it greatly altered subsequent burning regimens, causing further drastic reductions in VOR. But the results, even considering these caveats, are sufficiently alarming concerning the future of this iconic tallgrass species.

Two revelations: I am very loyal to these chickens and have gone the distance to manage our place on their behalf, so I am not a disinterested reporter on the study's conclusions. But burning regimens represent only one challenge to the species. A study published in March, 2015, concluded that vegetation height, which is greatly influenced by fire and grazing processes, was positively associated with nest survival. Greater Prairie-Chickens chose nesting locations that maximized time post fire while minimizing tree cover and distance to leks. . . . [However,] even the best management practices may prove to be futile in the southern Great Plains if climate change continues to create unfavorable

nest survival conditions. Management that creates and maintains suitable nesting sites through the use of interacting fire and grazing should maximize the potential for high reproduction in years when local weather variables are favorable.²

¹ However, one other study indicated that while 75% of nest losses in the study population of 24 nests was due to predation, "controlled comparisons provided no evidence that video surveillance attracted predators to nests. Variation in nest attendance had a minimal effect on nest survival compared to height of vegetative cover at the nest site." See "Patterns of nest attendance by female Greater Prairie-Chickens (*Tympanuchus cupido*) in northcentral Kansas," by Virginia L. Winder, Mark R. Herse, Lyla Hunt, et al., *Journal of Ornithology*, 157 no. 3 (July 2016): 733-745

²See "Weather Constrains the Influence of Fire and Grazing on Nesting Greater Prairie-Chickens" by Torre J. Hovick, R. Dwayne Elmore, Samuel D. Fuhlendorf, et al., in Rangeland Ecology and Management, 68, issue 2 (March 2015): 186-193. Three other articles confirming the conclusions concerning burning and grazing practices summarized here are "Alternative Rangeland Management Strategies and the Nesting Ecology of Greater Prairie-Chickens," by Lance B. McNew, Virginia L. Winder, James C. Pitman, et al. Rangeland Ecology and Management, 68, issue 3 (May 2015): 298-304; "Effects of grazing and prescribed fire on resource selection and nest survival of upland sandpipers in an experimental landscape," by Brett K. Sandercock, Matilde Alfaro-Barrios, Ashley E. Casey, et al., Landscape Ecology, 30, issue 2 (February 2015): 325-337; and "Effects of Wind Energy Development on Nesting Ecology of Greater Prairie-Chickens in Fragmented Grasslands," by Lance B. Mcnew, Lyla M. Hunt, Andrew J. Gregory, et al., in Conservation Biology, 28, issue 4 (August 2014): 1089-1099. See also the article by Jan Biles, "Burning, Grazing, and 'Human Activity' Threaten Birds' Future," in The Topeka Capital Journal, Sunday, July 06, 2008, interviewing Robert Robel, Professor of Biology at Kansas State University, and Jim Pitman, Small Game Coordinator for KDWP.



to the natural world and achieving lasting improvement in conservation and increased public awareness PW Editorial Committee, photos by Ron Klataske

Audubon of Kansas has played a major role in conservation and advocacy for the environment for many years. While still a regional office of the National Audubon Society, Audubon in Kansas spearheaded the establishment of the **Tallgrass Prairie National Preserve** beginning in October 1986. This year is the twentieth since Congressional passage of legislation creating this unit of the National Park System, as well as the 100th anniversary of the National Park Service. At the premiere screening of Dave Kendall's "Tallgrass Prairie National Preserve: A Flint Hills Love Story," friends expressed their thanks for Audubon's role in making this dream a reality.

Audubon's presence in Kansas, Nebraska and surrounding states is reflected in many ways in the landscape. A second new unit of the National Park System was developed in Nebraska. In 1991, after eleven years of dedicated effort led by Audubon in partnership with landowners and a wonderful network of Nebraskans, congressional approval of the **Niobrara National Scenic River** was finally achieved.

Audubon of Kansas (AOK) became an independent state Audubon organization in 1998 when National Audubon closed all the regional offices, and left many states without any staff presence. All of AOK's funding and leadership comes from the

central Great Plains and friends beyond. We haven't missed a step in our advocacy as we also strive to build our capacity.

Protection of the ecological values of the **Quivira National Wildlife Refuge** is a high priority for Audubon of Kansas. The Refuge is a "Wetland of International Importance," as designated under an international treaty signed in and became a part of the "Western Hemisphere Shorebird Reserve Network" in 1994. As many as 500,000 shorebirds depend on the refuge every year.

Our in-depth comments on the 2013 Draft Comprehensive Conservation Plan substantially helped guide the U.S. Fish and Wildlife Service to a final plan for the 22,135-acre refuge that we can all applaud. In May 2016 we mobilized the public and filed comments to the Kansas Division of Water Resources (DWR) concerning the refuge's senior water right that has been adversely depleted by DWR's issuance of permits for hundreds of additional groundwater irrigation wells with junior water rights. A DWR review found that the refuge's water supply "has been regularly and substantially impacted by junior groundwater pumping." Over the 34 years reviewed, shortages of greater than 3,000 acre-feet occurred in 18 of those years. Impairment of the refuge's water right

has become increasingly frequent and severe, resulting in the cumulative lowering of groundwater levels and instream flows in the Rattlesnake Creek Basin. AOK will continue to work on behalf of sound ecological values and recognition of Quivira's senior water right.

Most rural residents who cherish wildlife conserve habitat privately, like the family near Newton who recently wrote AOK indicating that, "we keep a portion of our little spot out here as wild as we can and really enjoy all the creatures which come to visit — or stay! We sincerely appreciate the work of Audubon of Kansas, which is tremendously important (especially now when public policy and actions often seem to be set against conservation work of any kind)." Facilitating such private conservation efforts, AOK often responds to individual requests for information on where and what to plant for local habitat enhancement projects.

However, governmental programs do have landscape-scale impacts-positive and negative-on land-use decisions and wildlife populations on private land. Foremost among those programs are the Conservation Reserve Program (CRP) and the Environmental Quality Incentive Program (EQIP). Because of the potential for wildlife, AOK actively promotes positive

practices in accord with these programs. The CRP, included first as a farm bill title in 1985, has been the most beneficial program in recent history. Special practices are designed to enhance habitat for Lesser Prairie-Chickens and other wildlife. However, Congress has diminished CRP authorization from 39 million acres to 24 million acres nationally, and it is of paramount importance that the conservation community work to reverse the downward trend in the next farm bill. Kansas has lost 1.7 million acres of CRP in the past ten years.

Likewise, we consistently argue against practices and expenditures that degrade ecological resources. We have been particularly concerned about federal expenditures to subsidize broadcast-herbicide spraying of prairies under the guise of EQIP "brush management" for rangeland health. We remain equally alarmed by fifty years of USDA subsidized bulldozing of native trees, shrubs and grasses in cultivated landscapes to convert natural draws to bromegrass

waterways. That practice has been a major factor in the decline of upland game birds.

AOK's Executive Director, Ron Klataske, serves on the USDA State Technical Committee where funding allocations and specs are debated. He has seen several hundred thousand dollars annually available for wildlife habitat go unused for that purpose, only to be then diverted to other uses. KDWPT Secretary Robin Jennison has refused to allow USDA to fund habitat protection for Black-footed Ferrets in Kansas, even though this program is used and is welcomed by ranch landowners in eastern Colorado. Such actions and inaction raise the question whether benign neglect of imperiled species is official state policy in Kansas.

If there has been any rationale for ignoring the diverse suite of imperiled species associated with prairie dog colonies, it has been at least in part due to the Kansas Senate Natural Resources Committee's hostility to protection of threatened and endangered species. Larry Powell, R-Garden City, chairman of the committee, has pushed several legislative measures in recent years to try to block any U.S. Fish and Wildlife Service conservation initiatives to protect the federally-listed endangered Black-footed Ferret and the imperiled Lesser

Conservation advocacy--and education--are both vital to protecting the natural world today, making certain it will be sufficiently intact or able to be restored in the future. These photos are of the Audubon of Kansas booth at the annual Mother Earth News Fair in Topeka.





Prairie-Chicken. He also led several legislative efforts in three successive sessions to eviscerate the Kansas Nongame and Endangered Species Conservation Act of 1975.

Threats to the 1975 Act kept popping up like "moles" in the Whack-A-Mole arcade game. The 2016 bill (introduced as Senate Bill 384) was initially on a fast track in the Senate Natural Resources Committee. Given little notice for a hearing, Audubon of Kansas was one of just two organizations that testified in person against the measure. As AOK members and others were made aware of the bill and contacted members of the committee, several senators expressed concerns. When chairman Powell did not have the votes to pass the bill out of committee in its introduced form, he asked three members of the committee to work with Chris Tymeson, legal counsel for KDWPT, on a substitute version. They addressed our major problems with the bill, and some of the Kansas Livestock Association's (KLA) concerns with KDWPT's administration of the Act. The vast majority of the damaging language that the KLA lobbyist pushed for in SB 384 was struck out of the substitute version, and the most destructive elements of the Act were averted.

However, what followed illustrates the need for persistent vigilance and involvement on the part of conservation activists like AOK. Aaron Popelka, a lobbyist with the Kansas Livestock Association, and Senator Powell added a provision exempting "registrations and certifications" that might otherwise require regulatory review. They were unwilling to give any examples to KDWPT of what would be exempted. On that basis we

continued to oppose the bill. It hasn't been utilized yet, and there is still uncertainty, but the consensus now is that it was designed to exempt certifications of water appropriations and pesticide registrations from review.

Since it was too late for the modified bill to run the normal course of proposed legislation, chairman Powell added it to a previously passed House Bill, HB 2547, using that bill, which originally named a Bison herd in Crawford County in honor of former State Representative Bob Grant, as a shell to advance the attempt to weaken the Kansas Nongame and Endangered Species Conservation Act. House members objected. It was then moved into House Bill 2156 (originally a bill dealing with groundwater management). The conference committee removed groundwater language and placed it in SB 337 (another bill dealing with the Division of Water Resources). That, in turn, created a "shell" out of HB 2156 and revisions to the Nongame and Endangered Species Conservation Act were included there—having never been considered in committee or on the floor by members of the Kansas House of Representatives. It was approved by the legislature as HB 2156 - with deletion of the original language that was most destructive to the Act, acceptable changes made with KDWPT concurrence, and the exemption for "certifications and registrations."

This type of chicanery in the legislative process, especially in the closing hours of legislative sessions, keeps constituents from knowing what is occurring and from assigning responsibility. However, because of the strong showing that AOK and the conservation community mounted to protect the overall integrity of the Act, it will likely remain intact without additional threats from the legislature in the near future.

In early February, following up on an earlier assault in 2014, Senator Powell struck again. Senate Bill 425 would have essentially eliminated permanent conservation easements. It sought to limit easements to not exceed the duration of the lifetime of the grantor, and proposed to make all such easements subject to approval of County Commissioners—government curtailment of private property rights that would have made conservation easements meaningless. AOK immediately alerted everyone in the conservation community, and was credited by an outdoor writer with having been the Paul Revere in that assault. Despite efforts to diminish public testimony by stringing out hearings over three dates and cancellation of proposed times for hearings, a huge preponderance of oral and written statements against the measure was presented by a united conservation community. Only three proponents spoke for the bill. Many AOK members wrote asking members of the committee to table this destructive bill. Senate Bill 425 was not reported out of the Senate Natural Resources Committee and did not pass.

Senator Powell and a majority of the sixteen senators who voted for his previous bill designed to bar perpetual conservation easements, Senate Bill 323 in 2014, will not be returning to the capitol for the 2017 legislative session. Senator Powell and serveral others were defeated in the August 2 primary, and two did not run again.

AOK advocacy involves manifold tireless efforts beyond lobbying and testifying before the legislature and governmental committees concerned with agriculture and the environment. Ron Klataske and AOK trustees have represented AOK at many meetings during the past year, including:

- Participating in the Eleventh Annual Dialog on Sustainability: "Paris Agreement on Climate Change and U.S. Clean Power Plan," Saturday, July 23, 2016
- Participating in the Conservation Reserve Programfocused meeting of the Kansas Technical Committee -June 20, 2016—regarding establishment of habitat for the Lesser Prairie-Chicken
- Cooperating with the Tallgrass Legacy Alliance through workshops and public education to publicize and advocate controls on the spread of invasive species such as old world bluestems and Sericea lespedeza in roadsides and pastures
- Sponsoring "Silent Spring 2016: Threats to Birds, Bees, and Other Wildlife" a conference in Lawrence, April 9, 2016, concerned especially with the threat to pollinators posed by widespread use of neonicotinoids

- Suggesting agenda items and presenting AOK positions to the Kansas Nongame Wildlife Advisory Council Meeting March 1 concerning: Black-tailed Prairie Dog management and conservation plans; the Black-footed Ferret Landowner Incentive Program for the 2017 EQIP program year; further protection for at-risk Ferruginous Hawks; placing further limitations on the trapping of River Otters in some zones within the state; publicizing the penalties for shooting hawks, owls, and eagles; and updating the Wildlife Diversity Plan
- Continued efforts in cooperation with Friends of the Niobrara to protect the outstanding values of the Niobrara National Scenic River corridor

In addition, AOK contributes to the Kansas Rural Center's Legislative & Policy Watch Weekly Updates during the periods when the Legislature is in session, through which Policy Analyst Paul Johnson keeps constituent organizations abreast of legislative initiatives that would affect the health of Kansas' land and people.



Undeterred by controversy or the absence of other organizations in the trenches on some occasions, AOK is working for wildlife in every forum possible. AOK eagerly joins landowners and others who strive to protect prairie landscapes and ecological values, and partners with other organizations to push agencies to change operational paradigms.



Forty-four years ago, when I first moved to Kansas, I never saw House Finches at my feeders. Mourning Doves built their flimsy nests in our pine trees and against all odds of such rickety domestic arrangements, reproduced so prolifically that there were large flights at sundown from gravelling and watering sites near Keats to their roosts on the northern edge of Fort Riley. I saw sizeable flocks of Prairie Chickens in surrounding fields, but never saw a Wild Turkey. Often on drives on the gravel roads east of Pottawatomie State Lake #2, I had a fair chance of seeing Loggerhead Shrikes. It was a particular treat to discover that a favorite since my boyhood in Indiana, Carolina Wrens, turned up occasionally on walks in wooded areas, and even, once in a while, sang in my backyard. Red-headed Woodpeckers were abundant on the dead snags in the then-recently-flooded Tuttle Creek Reservoir and the oak groves at Pottawatomie State Lake, but I never saw a Pileated Woodpecker, or even expected to glimpse one. In the seventies, Bobwhite Quail were so abundant, and the habitat so good for them on Fort Riley Military Reservation, that I often met groups of older hunters from Georgia or Alabama, who had come all the way north to Kansas for the excellent bird hunting. It was a paradox to me, who had grown up thinking of classic quail hunting as centered in just those states.

Today, the majority of birds enjoying their repast at my backyard feeders all year long are House Finches, challenged for that status only by the Goldfinches who come in during the winter months. The mournful calls of the Mourning Doves are now rivaled more and more by the train-whistle tooting of Eurasian Collared Doves,

a species that has colonized the area only within the past decade, and seems ever-increasing in numbers. Though there was a time when I was showing foreign visitors the Konza Prairie, three times out of four I could count on jumping at least one Prairie-Chicken, these birds are becoming more and more scarce, their flocks smaller and more scattered. However, you cannot drive far in the country (or even in neighborhoods in town bordering Wildcat Creek or wooded ravines that provide wildlife major thoroughfares) without seeing large flocks of Wild Turkeys. For the past fifteen or twenty years, quail populations have plummeted, and Ft. Riley no longer seems a magnet for out-of-state bird hunters. After the severe winters of the seventies decimated their populations, Carolina Wrens have rebounded to become common residents in every dooryard, cheering the neighborhood with their implausibly echoing, insistent song, and their busy, energetic, inquisitive personalities. The dead snags in Tuttle Reservoir have mostly rotted away or boating enthusiasts have cut them down in winters with historically low waters, and Red-headed Woodpeckers are much scarcer than I remember. (Older birders tell me that their populations are dependent on the acorn harvest, and in lean years, the whole population does a short migration to more promising acorn groves in Oklahoma.) But Pileated Woodpeckers have moved into the Manhattan area, and in the last three years have been seen on every Christmas Bird Count.

Over the years, through annual population records like the Christmas Bird Count and the more recently instituted Migratory Bird Count and Breeding Bird Surveys, "citizen scientists" have provided invaluable diachronic statistical evidence to confirm or correct personal experience and judgments based on anecdotal evidence. Temporary fluctuations in populations due to drought or poor acorn production or harsher or milder winters loom large in our immediate sense of the health of bird populations, but the

truly significant data are those which represent long-term trends. For all the particular species I have mentioned in my sketches above fall into one of four categories: species that are expanding their range, species that are increasing in numbers, species that are decreasing in numbers within their former range, and species that are endangered or extirpated in their former breeding areas.

Of course, the populations of migratory waterfowl and songbirds are affected by many factors besides what happens in Kansas. But with

regard to factors in Kansas and the central Great Plains, the two elements having the greatest impact on our upland bird populations are the same as those affecting migratory waterfowl and songbirds:

habitat loss from drought, development, and certain agricultural practices, and the explosion of populations of nest predators. To be sure, the proliferation of *Homo sapiens* colonizing every imaginable habitat over the globe stands out as one of those statistically significant long-term trends affecting our fellow creatures in manifold ways, many of them bad. Much more controversial and unthinkable than attempts to control skunks and raccoons would be measures of population control on us. We must concern ourselves with the practicable. On the other hand, some species of birds have adapted well to our presence in the human-altered environment: American Robins, House Sparrows, European Starlings and the huge https://www.pinterest.com/pin/199143614745564938/ flocks of blackbirds that one sees in winter around confined animal feeding operations and grain-

storage areas are prime examples. Cliff Swallows have found the construction of concrete bridges an absolute boon, while Barn Swallows, faced with fewer and fewer small farms with many outbuildings and barns, have been stressed to find substitutes. Niches in corners of mall arcades and porches of public buildings have proved a poor substitute in the face of public intolerance of walls and walkways streaked with swallow guano. Chimney Swifts once thrived in the tall chimneys that sprang up like mushrooms all over industrial areas expanding across the continent in the late nineteenth and earlier twentieth centuries. The impacts of the third industrial revolution and globalization on the rust belt have surely had a damping effect on chimneys, and Chimney Swifts. The giant hollow trees that served the birds as nurseries before the Europeans came are only a distant historical memory.

When I was a boy, I often saw songbirds, particularly Robins, huddled on the lawn, seemingly paralyzed, fluttering their wings and drooping their heads, beaks open, in what looked like anting behavior, but was not; since the banning of DDT, any birds I have observed behaving like this have been, indeed, anting. The same ban on DDT, thanks to Rachel Carson, has brought back the Bald Eagles and Peregrine Falcons. Since the late 1980s, Bald Eagles have begun to breed again regularly in Kansas and Peregrines have adapted to the man-made cliffs of old-fashioned concrete and steel

> skyscrapers in cities such as Topeka. Some species have benefitted from active human efforts to intervene positively in providing nesting habitat and protection. So, when I was a boy, I often read predictions of the disappearance of Bluebirds, out-competed for increasingly scarce hole-nesting sites by alien House Sparrows and Starlings; but the popularity of maintaining trails of Bluebird houses in country areas has made these gentle, cheerful residents a common sight again.



Painted Bunting

http://members.boardhost.com/funlover/msg/1415275913.html

The natural environment constitutes an enormously complex web of relationships and even with all the scientific research and technological resources at our disposal, we understand only a fraction of those interactions.

The presence or disappearance of birds like the Pileated Woodpecker, a crow-sized cousin of the apparently extinct "Great God-Almighty Bird," the Ivory-billed Woodpecker, or the Peregrine Falcon, or the Bald Eagle, or even the Bluebird registers with us easily; but the web of nature extends far beyond and beneath our superficial sensory notice. Fortunately, both birds and their food sources are more visible and easily studied than, say, nematodes or the root hairs of rye plants. But obscure facts and figures about the latter do not merely stun the imagination; they suggest the manifold details of structures and relationships in nature that we are only beginning to understand.1 These miniscule worms and prairie forbs and grasses comprise essential elements in the great



Pileated Woodpeckers

Dashing in and destroying a habitat concerning which we have only the faintest outline of an understanding and appreciation amounts to a towering imprudence, in the case of a Kansas prairie no less than a rainforest in Borneo or Brazil. We do not even

chain of beings that ultimately sustains our grassland birds.

¹In his book, Konza Prairie: A Tallgrass Natural History (Lawrence, Kansas: The University Press of Kansas, 1987), p. 202-3, O. J. Reichman points out that "on Konza [K-State Research Prairie], nematode densities reach astounding levels as many as 500,000 per square foot in the upper 8 inches of soil during their peak abundances . . . (p. 151). Reichman also notes that "a single rye plant was found to have 14 billion root hairs, with a total surface area of 4,000 square feet (370 square meters; the size of two large homes). The primary roots had a total surface area of 2,500 square feet, yielding a total surface area 130 times that of the aboveground stems and leaves" (p. 148).

understand why quail populations have plummeted in recent years, and only in the last couple, begun to feebly rebound in some areas. Habitat destruction? The habitat on the Fort Riley Military Reservation has been substantially unaltered by the usual means over the past forty years, yet the quail have faded away there no less than on neighboring agricultural areas. What accounts for the phenomenal success in naturalizing Wild Turkeys in Kansas habitats? Neither the El Paso subspecies nor the Eastern Wild Turkey are able to make a success here, but an interbred population has been spectacularly prolific.

Why have House Finches and Eurasian Collared Doves succeeded in expanding their ranges and colonizing new areas so effectively? Is the recent presence of Pileated Woodpeckers the result of gigantic climatic shifts, rising global temperatures, the colonization of formerly grassland areas in Kansas by Eastern deciduous forests, or some other causes to which we are as yet blind?²

There is much that we do not yet understand about the dynamics of bird populations in Kansas, and many things that are perhaps beyond our control. After all, even before the coming of the Anthropocene, species appeared and fell by the wayside in accordance with great natural change. But even some of the most powerful forces acting today, like climate change, owe too much to human activity. Perhaps, with better understanding and greater human effort, the worst consequences can be retarded or even arrested in time. And certainly the unreflecting destruction of habitat, the result of indifference and greed, can be combatted by the dissemination of knowledge, however imperfect and partial at this point, and by prudent moderation in undertaking the irreversible alteration of habitats and ecological systems we only partly understand. The world might be best served by our taking the time to reflect on and evaluate, and encouraging our neighbors and our children to reflect on and evaluate, the kinds of changes we have seen, some of which I have outlined here, by trying to imagine vividly a world without Bluebirds or Bald Eagles or Sandhill Cranes or Painted Buntings, a much-diminished, less vivid, less vital world. And it would be a world much less accommodating to us. For as Bridget Stutchbury says, concluding her chapter, "Canaries in the Mine" in her 2007 book, Silence of the Songbirds:,3

Our songbirds are disappearing, and . . . our natural world will be shaken to the core if their numbers drop so far that they can no longer play their traditional and crucial ecological roles in our natural communities. Birds have been such an important part of the world around us for so long that they are irreplaceable. Plants depend on them to pollinate flowers and to carry their seeds and fruits away from the parent plant. Plants are also counting on birds to keep leaf- and seed-eating insects under control (though the insects would be perfectly happy to see the birds disappear). For tens of thousands of years insects have been falling prey to billions of hungry mouths as the birds move north and gorge themselves each spring and summer. The world around us is already in a very fragile state, barely hanging on by a thread as we continue to cut forests and plow under grasslands, pour insecticides on the land, and expand our cities to accommodate the millions of people that join our world every year. We cannot afford to lose our birds; they are part of the complex web of life that



sustains life on our planet. (pp. 32-33)

Clearly it is imperative that we resolve to do whatever we can to forestall the day when that imagined birdless world becomes a reality for Kansas.

About the contributor: Michael L. Donnelly is retiring as an Associate Professor of English at Kansas State University. A one-time Secretary for the Kansas Wildlife Federation, he participates regularly in the Christmas Count and Migratory Bird Counts with the Northern Flint Hills Audubon Society, has served since 2014 as a Trustee of AOK and is editor-in-chief for this edition of Prairie Wings.

2.Breeding Bird Survey statistics supplied by John Schukman confirm my anecdotal experience with the species mentioned: House Finches have seen a 15.7% increase in numbers 1966-2013, Pileated Woodpeckers in that period a 13.3% increase, Wild Turkeys a 13.4% increase, and Eurasian Collared Doves an increase of a whopping 44%. Carolina Wrens have shown an increase of 5% over the period, but with dramatic fluctuations, peaking in the late nineties and plummeting in 2000-2001, then peaking again in 2007-8 but dropping to the lows of 2000-2001 in 2009-10 before rebounding somewhat since; meanwhile Mourning Doves show many population fluctuations with a slight overall decrease, Greater Prairie-Chickens have decreased steadily in the eastern tallgrass prairie region to an overall 3.3% drop in populations, Bob-whites show a 2.3% decrease in Kansas, 4% range-wide; Red-headed Woodpeckers have declined steadily since a peak in the late seventies, down now .95%, while Loggerhead Shrikes have suffered a steady decline of 5.6% overall, with only minor blips through the mid-nineties countering the consistent downward spiral.

3. New York: Walker and Company, 2007.

Celebrate This Kansas

a man's last wish, this heat what warmed a weathered of the stars, the searing rise of summer or fast spread This creek's trail rerouted by deer and wild turkey. time that tilts the seasonal light. Dream the return rock enough for a woman to rest on with her baby, after the beloveds die. This horizon the homeland We breathe the air of those who spoke languages The bones of this land and the feathers of this sky We turn our heads away from where the raccoon This wooded curve the one favored by bluebirds these fossils, love songs of memory and longing of thunderheads, the secret-holding cedars and of generations beforehand. This rain was once of butterfly milkweed oranging in ancient sun. witness rocks that migrate across the prairies. Celebrate this sky, this land beyond measured through grasslands, the remnant of hard rain where the grandmothers and grandfathers sa forgotten as the glaciers. We walk the fields following last summer south. All we see, of weather and loss, wars and births. know us better than we know ourselves. hid his family from the storm hundreds the ghost and angel of billions of trails that once fed the fish of inland oceans.

Caryn Mirriam-Goldberg



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