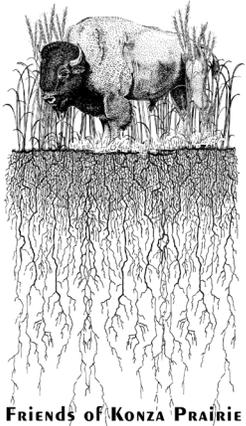


# Bluestem &



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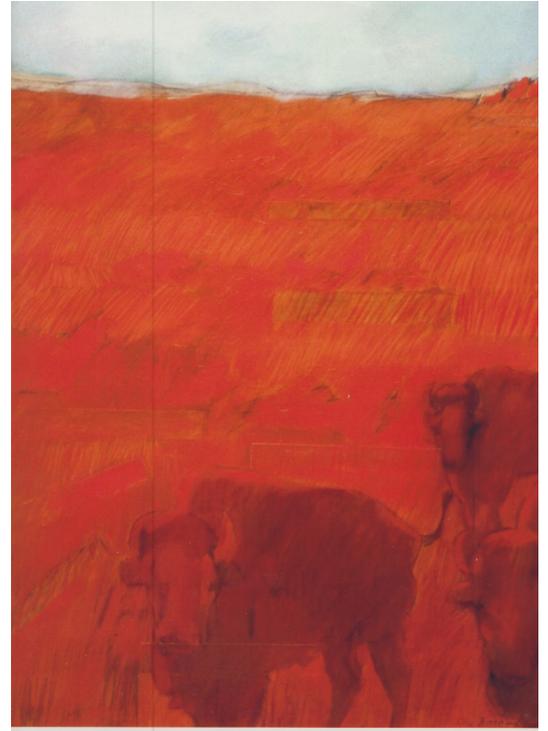
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The "Red Prairie and Bison" by artist Patricia Duncan is at the Beach Museum.

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# Bison

**January 10 - Docent Roundup - 10 a.m. - noon**

**January 25 - 5th Annual Cure for Cabin Fever  
Featuring "The Red State Blues Band"**

**March 7 - Docent Training Begins - 9 a.m.  
at the Stone House**

**See page 8 for more information**



January 2015



# Outgoing PRESIDENT'S MESSAGE

Karen Hummel

Many thanks to all of the members who have contributed to the success of Friends of Konza Prairie. The organization continues to be strong and to provide financial backing in support of the Konza Environmental Education Program. What a treat: to be able to participate in prairie adventures, enjoy the associated beauty, and to help make a unique and important educational program possible.

This was a busy autumn. For the second consecutive year, the Konquer the Konza 25K race attracted close to 200 runners to Konza on Sunday, September 21. The race, sponsored by Manhattan Running Company, resulted in a contribution of \$4000 for the Konza Environmental Education Program.

Visitors' Day brought nearly 1000 adults and children to Konza on Saturday, September 27. Participants were able to view, firsthand, many aspects of Konza Prairie, and to enjoy hay rides through a research area, guided tours of the bison area, hikes, and activities focused on the geology, history, flora and fauna of the area. Area businesses helped to sponsor the event by contributing toward transportation and other expenses. FOKP is grateful to the following businesses for their support of Visitors' Day:

- **Blueville Nursery**
- **Classic Wine & Spirits**
- **Community First National Bank**
- **Endacott Lighting**
- **Holiday Inn**
- **Howie's**
- **Kellstrom Pharmacy**
- **Little Apple Brewery**
- **Nespor's Wine and Spirits**
- **The Pathfinder**

The Visions of the Flint Hills Art Show and Benefit at the Buttonwood Art Space in Kansas City attracted 250 submissions from more than 60 area artists. Guest curator Kim Casebeer juried the entries, selecting 150 for inclusion in the show. Kathy Drungilas arranged the works in the display space, coordinated the impressive spread of appetizers and libations, and brought in a trio of jazz musicians for the Opening Gala on October 3. The opening coincided with the First Friday Art Walk, ensuring a good crowd of visitors. Meadowlark Hills Retirement Community also sponsored a van, allowing interested Meadowlark Residents to attend. The show has ended, but you can still view the artworks at <http://visionsoftheflinthills.org/the-art/2014-art>. Additionally, Buttonwood has posted links to three interesting videos about the Flint Hills at <http://visionsoftheflinthills.org/preserving-flint-hills-prairie/>.

Friends of Konza Prairie would like to acknowledge the following sponsors of the 2014 Visions of the Flint Hills Benefit. These area organizations generously contributed to the effort, and their sponsorship dollars serve to increase support for the Konza Environmental Program. The sponsors are listed on the Visions website at <http://visionsoftheflinthills.org/show-sponsors/>. A copy of the poster is shown on the next page.

This is my last message as FOKP President. Please also read the message from the very capable and dedicated Diane Barker, our incoming FOKP President. I am starting my second three-year term on the FOKP Board and will do my best to contribute to the organization.

FOKP members contribute in so many ways, and their activities vary widely in purpose and visibility. In trying to think of everyone who should be acknowledged as strengthening the program during my tenure as president, the names are too numerous to mention.

First of all, thanks must go to those of you who faithfully renew your memberships annually, and give at a level appropriate to your means and priorities. You provide the financial lifeblood of FOKP, and the Konza Environmental Education could not exist without your support. Please invite your friends, relatives, and neighbors to join the fun!

We extend appreciation to John Briggs and Eva Horne, who attend board meetings and support FOKP in many ways. All researchers who include a role for KEEP in their grant proposals provide a wonderful and much needed support role.

We also appreciate those contributors who provide services behind the scenes to ensure continuity and a smooth-running operation. Those contributors include, but are not limited to, Patrick Gormely for membership, Cindy Jeffrey for

*Outgoing President's Message continued on pg. 3*

publications, Ann Murphy for hospitality, Barb Van Slyke for keeping our correspondence, communications, and reservations in order, Charlie Given for his role as FOKP historian, Tom Floersch and Ray's Apple Market for providing water and bread for events, Chod Hedinger for serving as unofficial FOKP event photographer, and Darren Gunderson for helping with events and merchandise sales.

Board officers have performed their duties admirably. Diane Barker helped greatly as president-elect and as chair of the Nominating and Publications committees. Clancey Livingston saw that our board actions were recorded and retained for future reference. Shelly Gunderson had the duty, as treasurer, of keeping track of incoming funds for memberships, Visitors' Day sponsorships, Visions sponsorships, merchandise sales, miscellaneous donations, and for paying bills. The treasurer's duties increased this year due to our added activities, and we thank Shelly for meeting the challenge.

Thanks to all Board committee chairs and members for their contributions to FOKP operations and decisions. This is a good board. Each member cares about the prairie and the education program. Each brings a unique perspective based on personal experiences, academic discipline, and interests. There is good energy and ability to work to a timely consensus on decisions.

Thanks to the docents, the workday volunteers, the Saturday hikers, the fire volunteers, the photographers, and to all who care about Friends of Konza Prairie and Konza Environmental Education Program, and work for the success of those programs. And, of course, we have great appreciation for Jill Haukos and Hallie Hatfield and their skilled and dedicated program operation.

Finally, it is appropriate to acknowledge the contributions of Gene Towne. Throughout the years, Gene has shared his expertise with FOKP members and KEEP Docents, drawing upon his experience with bison management, fire team training, watershed burn scheduling and management, and study of the effects of burn and grazing strategy on the growth patterns of plant populations in the watersheds.

It has been an honor to serve all of you as FOKP president.

**Visions of the Flint Hills**  
AN ART SHOW  
BENEFITTING friends of **KONZA** prairie

**THANK YOU TO OUR SPONSORS!**

**BISON LEVEL**

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**PRAIRIE CHICKEN LEVEL**

Meadowlark Hills | Briggs auto.com  
Ladybird DINER | Flint Hills Wisdom Keepers | StateBank

**BURNETT AUTOMOTIVE**

**FLINT HILLS LEVEL**

The Nature Conservancy



## Incoming PRESIDENT'S MESSAGE

Diane Barker

Greetings from our home on Bluebird Hill, named for the resident flock of eastern bluebirds. I haven't seen or heard much from those bluebirds, so I know they're in winter mode. I hope everyone had a joyful Winter Solstice holiday or whatever tradition you follow, and that everyone travelled safely.

I'm pleased to serve as President of Friends of Konza Prairie for 2015. Your continuing membership and participation in FOKP allowed our Environmental Educator, Jill Haukos, and Assistant Environmental Educator, Hallie Hatfield, to provide excellent training for docents. This pool of knowledgeable docents then enabled KEEP to bring over 2,000 K-12 students to Konza Prairie, where they hiked the Nature Trail, rode school buses through the bison loop, waded into Kings Creek to collect macroinvertebrates, then classified them in the lab. Students even got to just run through the big bluestem and hear that indescribable hiss of grass. Each activity was carefully planned and age-specific. Over 1,000 adults enjoyed docent-led wildflower walks and bison loops. You can be proud to support an organization that does so much for our community and the field of environmental education.

I have two goals for the coming year. FOKP will turn 20 years old in 2016. The organization officially formed in 1996, so we have this next year to plan how we want to celebrate our anniversary. Please let the Board know what you would like to see happen and then volunteer as needed to make it happen.

The second goal is closely tied to the first. Our goal every year is to increase our membership, but this year I would like to attract new members by making sure people understand the strength of the program. Now that USD 383 and USD 475 children are getting substantial environmental education opportunities on Konza year after year, now that there is a 25K trail run held on Konza, now that the Collegian recommends that students hike Konza, there could be a groundswell of support for FOKP. We have a public presence, but we need to supply the details, so here are some ways to get the word out.

**Share your newsletter** with family, friends, and anyone who might be interested.

**Bring a friend** to an event. The Cure for Cabin Fever on January 25th would be a great choice.

**Talk about the specifics** of the national Schoolyard Long-Term Ecological Research (SLTER) activities.

**Reach out to members** who might have drifted away. Get them up to date on changes like the Konza Prairie YouTube channel at <http://www.youtube.com/user/TheKonzaPrairie>

**Talk about the amazing programs** you've been involved in and the fun you've had to family, friends, and coworkers.

It is our good fortune, as members, to share what we know about the quality of KEEP. People need to know the details, that the kids put on boots, wade in Kings Creek, collect macroinvertebrates, take them back to the lab, identify them, record the data, and return the water and invertebrates to the creek. They need to know that kids get hands-on experiences like collecting data on grasshoppers that becomes part of SLTER (Schoolyard Long Term Ecological Research).

Here's a catchy slogan to help spread the word. **Don't KEEP it to yourself!**

We've had some changes to the board, so I'd like to acknowledge the exceptional service of those who are leaving and welcome those who are new.

**Clancey Livingston**—is leaving the FOKP Board after serving for two years. He completed docent training in 2011 and served on the Docent Committee, as Co-Chair of the Publications Committee and as Secretary. His editing skills will be greatly missed.

**Patrick O'Neal**—is leaving after serving on the FOKP Board for three years. He was active on the Facilities Committee and chaired the committee for 2014. He helped tremendously with the new bridge and will continue his work at Konza as a valued staff member.

**Doreen Towne**—is leaving after serving on the FOKP Board for one year. Doreen was very active as a docent and served as Chair of the Docent Committee. We thank her for her dedicated service.

**Ken Stafford**—served one year to complete Jerry Freeze's term. Ken is now beginning his first three-year term. We thank him for his service on the Facilities Committee.

**Greg Adams**—was voted onto the FOKP Board at the December meeting and then elected President-Elect. He will also serve as Chair of the Docent Committee. We are happy to have such a dedicated and enthusiastic member on Board.

**John Harrington and Carol Gadbury** —are starting their first three-year term, John as chair of the Publications Committee, and Carol will be on the Membership Committee.



## DIRECTOR

John Briggs

It is early December and I am back in my office in Bushnell Hall after spending 4.5 months in Maine while I was on my sabbatical. It was very nice to be in Maine and it was very productive for me. But before I let you know what I accomplished on my sabbatical, I want to say a special thanks to the Konza Prairie staff. Every one of them stepped up and went beyond the call of duty to assure that things operated smoothly during my absence. While I did have e-mail and phone service, which helped me keep up with some of the activities, the staff did a superb job of running a very busy biological station during the busiest time of the year, including Visitors' Day and the Bison Round-Up! It was humbling and satisfying to me that things went as smoothly as they did. Humbling, because as director, I think I am important to the operation of the biological station, but satisfying, because when I am no longer director, Konza Prairie Biological Station will be in great hands! Thanks again to everyone for their special efforts for Konza while I was away.

While I was on sabbatical, I took the opportunity to work on several manuscripts that I have been collaborating on with colleagues at Kansas State University and other universities (Missouri State University, Oklahoma State University, University of Nebraska and the University of Virginia). Most of them are either in press or have been submitted to scientific journals. In addition, I was an invited speaker to a special session on the expansion of woody plants in grasslands at the annual meeting of the Ecological Society Meeting of America in Sacramento, CA. This was a wonderful opportunity for me to highlight how the long-term experimental design coupled with the long-term data collection on Konza Prairie is crucial to help us understand and manage tallgrass prairie, especially in a changing climate. This is also a good time to acknowledge Dr. John Blair, who led a successful effort in renewing the Long Term Ecological Research on Konza Prairie (who collected the data that I presented) funded by The National Science Foundation. The grant, "LTER: Long-Term Research on Grassland Dynamics-Assessing Mechanisms of Sensitivity and Resilience to Global Change", will provide critical funding to the research program at Konza Prairie for the next six years. This program has been in place on Konza Prairie since 1981!

I am including the first paragraph of the NSF Panel Summary written by the panel that reviewed the proposal to illustrate how KPBS and the LTER program at Konza are viewed by the scientific community:

"Konza has a long history of supporting top research in grassland ecology. From LTER 1-6, the foci moved from fire-climate-grassland interactions, to that plus watershed research, bison and cattle grazing, to global change research, invertebrate herbivory and research on streams. LTER 6 was very productive, producing 384 publications, 305 of which were in refereed journals. The PIs of LTER 6 were able to leverage additional money from regular panels totaling 28 million dollars. Panelists agreed that Konza has produced important publications that are having far-reaching impacts on ecology and that their results are reaching grassland managers."

Again, congratulations to Dr. John Blair and the other LTER investigators for their hard work on getting this grant funded. You can read the news release from KSU on this award at: <http://www.k-state.edu/media/newsreleases/nov14/lterrenewal11614.html>

In addition to working on scientific manuscripts on my sabbatical, I also spent a lot of time comparing KPBS to other biological field stations. I won't go into all of the details of my extensive survey, but one item that I want to highlight is that most successful biological field stations have a large percentage of their funding from private (non-public) sources. This is an area when KPBS is lagging behind the other stations. It is obvious that if KPBS is going to continue to grow and develop as a high quality research station, private funding has to become a larger part of the funding equation.

To help in this endeavor, I attended a short course entitled "Sustaining Biological Infrastructure: Strategies for Success; A short course for project director." This week-long course was developed by the Ecological Society of America and was partially funded by the National Science Foundation. The concept behind the course was that public funding is not going to be able to maintain a sustainable level of funding to support biological infrastructures (e.g., field stations, museums, special biological collections, etc.) and those managers need to brainstorm new and innovative ways to increase their funding sources to allow them to become more sustainable in the future. It was a very productive week and I look forward to applying some of the skills and techniques that I learned at this course to KPBS.

In closing, let me thank the KPBS staff one more time. They do an excellent job, which makes my job a lot easier. In addition, FOKP is vital to the operation of KPBS. Every time I attend a FOKP board meeting, I am amazed how much FOKP does for KPBS, especially for the environmental education program. I am also very proud of the hard work from the FOKP board members. The next time you see one, please thank them!

As always, please contact me ([jbriggs1@ksu.edu](mailto:jbriggs1@ksu.edu); 785-532-0140) if you have any questions or concerns about KPBS as we continue to develop as one of the finest biological field stations in the world.

John M. Briggs, Professor of Biology  
Director of Konza Prairie Biological Station  
Division of Biology 104 Ackert Hall



# FROM THE STONE HOUSE...

Jill Haukos, Environmental Educator

## Keystone Species

A recent topic of discussion here concerned the definition of a “keystone species” and more specifically, what the keystone species are for the tallgrass prairie. The

definition of a keystone species is “a species that has a disproportionately large effect on its environment relative to its abundance.” Interestingly, this definition doesn’t say if there is only one keystone species per ecosystem. Another term can be brought into the mix is “Foundation Species.” A foundation species is “usually primary producer (plant) that dominates an ecosystem in abundance and influence.”

With those two definitions in mind we can take a look at some prominent species in grasslands and review their roles and relative level of importance in a system. In the shortgrass prairie, the black-tailed prairie dog is



a keystone species. Without the prairie dog, the complex underground system of tunnels that is home to scores of different prairie species (burrowing owls, black-footed ferrets, badgers, rabbits, rattlesnakes, lizards) simply wouldn’t exist, nor would predators (hawks, owls, eagles, coyote, fox) have the prairie dog as its tasty prey. The prairie dog affects over 150 different vertebrate species – not to mention the invertebrates. Their foraging and feeding practices enable a more nutritious, diverse and nitrogen-rich mixture of grasses and forbs. There’s no question that the prairie dog is a keystone species of that system.

However, with our thin, rocky soil, no prairie dogs are to be found in the Flint Hills. What species could be so influential as to affect many of the other species of the tallgrass prairie? It would have to be the American bison, of course. It’s well known that most of the bison were slaughtered between 1830 to 1880, with their numbers going from 30-60 million to just a couple of thousand in

the space of 50 years. However, with conservation efforts for both the tallgrass prairie and the bison we are beginning to learn of the influence of this single species on many of the other species of the tallgrass prairie.

But the question is: what effects do bison have on the prairie? Are these effects sufficient to earn the designation as a keystone species? The millions of bison were efficiently replaced by millions of cattle, but research has shown that cattle don’t act like bison. By eating grasses, both bison and cattle remove the competitive influences of their target food plants and thus allow the non-target plants to gain a foothold and

grow. Additionally, by excreting urine and feces, both cattle and bison fertilize and nurture the non-food plants. The difference between the two lies in their behavior.

Cattle graze on a larger variety

of plants (more forbs and browse species) and will roam all over an area – prairie and woodlands both. Bison typically limit their food choices to grasses and they prefer to spend their time in open prairie.

Bison will wallow in the dirt and create buffalo wallows – small ecosystems in themselves. They’ll also horn trees (rub trees), effectively killing them. Cattle neither wallow nor horn trees. Additionally, research has shown that in areas where bison graze the abundance and biomass of annual forbs is higher in sites with bison than in sites with cattle.

When viewed as a whole, the effects of selective grazing (on grass), regional excrement (open prairie), and specific behavior (wallows and horning) of the bison all add up to qualify them as a prairie keystone species.

# DOCENT SPOTLIGHT

## Charlie Given

### 1. What motivated you to become a Konza Prairie docent?

Before moving back to Kansas, I lived in Woodland Park, CO, just a few miles from Florissant Fossil Beds National Park. During the summer, I worked as a full time volunteer and during the winter as a weekend volunteer. At the time I came back to Kansas, John Zimmerman, Phoebe Samelson, Anne Feyerharm, and a few others were setting up a docent program for what was then called Konza Prairie Research Natural Area. Since what they were doing was very similar to what I had been doing in Colorado it seemed a natural fit for me to get involved. Shortly after, Val Wright took over the program and suddenly we were in full swing. I must say that the docent training was minimal at first, and my experience at the Fossil Beds came in handy.

### 2. What are some of your hobbies and interests?

Konza has been my prime interest for the past 20 years, although I am starting to reduce my time at Konza due to family requirements and advancing age. (Note: no one else is permitted to refer to that last fact). I can still be found there pretty frequently, although I have trouble keeping up with Earl's group so I'm pretty much on my own. During the recent bison roundup I was able to locate two artifacts in the bison enclosure while the bison weren't roaming.

Other interests: keeping track of solar activity (sunspots, flares, coronal mass ejections, etc.). This is done strictly via the Internet.

Playing tennis during the 8 or so months that we can be outside. Two hours three times a week with a group of players fairly close to my age is easily manageable.

### 3. What is the best part of being a volunteer at Konza Prairie?

That's easy: the people. Two categories: The kids and the other docents. I thoroughly enjoy working with the kids, particularly the younger ones, and the other docents are great people to work with. It's a super situation.

### 4. What brings you the most joy in your life?

Aside from being with family, which is probably first on anybody's list, the thing that pleases me most is watching a youngster discover a new interest or expand a latent interest in something that is of interest to me also. While many of the kids we work with at Konza have only a passing enthusiasm for what we try to put across, that one or two in a group that really gets fired up is worth the effort we put in.



## New FOKP Board Member

Greg Adams

Greg's passion for hiking led to a chance meeting on the Nature Trail with Jill Haukos and Chod Hedinger. Jill convinced Greg to go through docent training. Greg and his wife, Jan completed docent and Kansas Master Naturalist certification in 2013. They were awarded Docent of the Year, hit the ground running, and have never looked back.



*(Incoming President's Message Continued from page 4)*

Three upcoming events you won't want to miss start with the Docent Roundup on Saturday, Jan. 10th, from 10 a.m. to noon. Dr. Jennifer Smith, NEON Prairie Peninsula Domain Manager, will explain the goals of the NEON program (National Ecological Observatory Network). Help welcome the new docent class, celebrate a successful 2014, delight in the docent awards and catch up with everyone after the holidays. Share a cookie or two.

Then on Sunday, Jan. 25th, have we got a cure for the winter blues! Come to the 5th Annual Cure for Cabin Fever and rock to the musical stylings of The Red State Blues Band. Check out their website, [www.redstatebluesband.com](http://www.redstatebluesband.com). If you haven't heard our local Konza and K-State researchers rock, you've been missing out. There will be dancing! Be sure to let Ann Murphy know if you are bringing soup. Please bring your own environmentally friendly bowl and spoon. The band starts at 2p.m. and the soup's on at around 3:30 or 4. Please bring a container if you would like to take any leftover soup home.

Our third event is Docent Training, starting on Saturday, March 7th, from 9 a.m. to noon in the stone house. I look forward to seeing you at all these events, and remember,

**Don't KEEP it to yourself.**

## UPCOMING EVENTS:



### **January 10 - Docent Roundup 10 a.m. - noon**

**Speaker Dr. Jennifer Smith, NEON Prairie Peninsula Domain Manager, also, statistics for 2014 year with KEEP, Docent awards and recognition, and a photo year-in-review.**

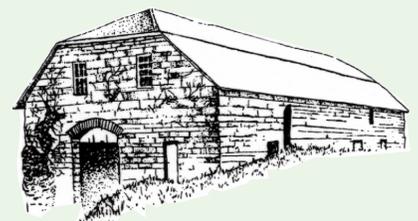
**Please bring a dozen cookies or bars that we can snack on and use later in the year at docent training.**

### **January 25 - 5th Annual Cure for Cabin Fever**

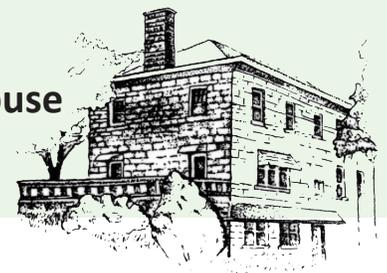
**Featuring "The Red State Blues Band" at 2 p.m.**

**Soup served at 3:30 p.m. If you would like to volunteer to bring a pot of soup to share, contact Ann Murphy, 539-2056, [murphyap66@yahoo.com](mailto:murphyap66@yahoo.com).**

**Bring your own bowl/utensils and something take leftover soup home in.**



### **March 7 - Docent Training Begins - 9 a.m. at the Stone House**



# A Book to Chase the Winter Blues Away

Diane Barker

## O. J. Reichman, *Konza Prairie: A Tallgrass Natural History*, University Press of Kansas, 1987

This classic in the field of natural history delivers what the title promises: the history of the tallgrass prairie ecosystem tailored to Konza Prairie. Reichman was relatively new to Kansas State's Division of Biology and the tallgrass prairie when the University Press of Kansas approached him with the idea of a book about what was then called Konza Prairie Natural Research Area. The whole site was devoted to research and therefore was not open to the public, so the proposed book could in part satisfy people's curiosity about the place. He agreed to take on the project and knew where to get help understanding the scope and intricacies of Konza. His acknowledgements, note, and introductory chapter read like a Who's Who for Konzaphiles: Lloyd Hulbert, Ted Barkley, John Zimmerman, Clenton Owensby, Elmer Finck, Marty Gurtz, Richard Elzinga, Joe Gelroth, Patricia O'Brien, and Katherine Ordway. He read all the research results he could find on tallgrass prairies and talked to colleagues. Wanting a sense of the seasons on the prairie, he and his wife, Jessica, walked or drove the prairie every week for months.

The resulting book takes a practical and elegant approach to accessing the enormous subject. The best way I can describe it is that Reichman creates a three dimensional tapestry, allowing you to take in the sweep of landscape, but then he directs you to the small scenes, or patches as he calls them, that form the whole. Each patch seethes with action and fine detail. Throughout this tapestry of competition for light, territory, water, mates, and food, he also weaves the element of time.

***"At first glance, the tallgrass prairie appears monotonous. When seen from a passing automobile, the vast expanse is interrupted only occasionally by ribbons of forests that wind along streams and creeks. It is not until one peers into the prairie, rather than at it, that its true nature, its complexity and diversity, is revealed. In a tallgrass prairie, most of the action takes place on a small scale, within patches hidden under the canopy of grass."*** (pg. 2)

We spend much of the book in these small patches, mosaics that create the three major habitats: grasslands, forests, and streams. In the patches we encounter the myriad actions and entanglements of plants, animals, microbes, and elements.

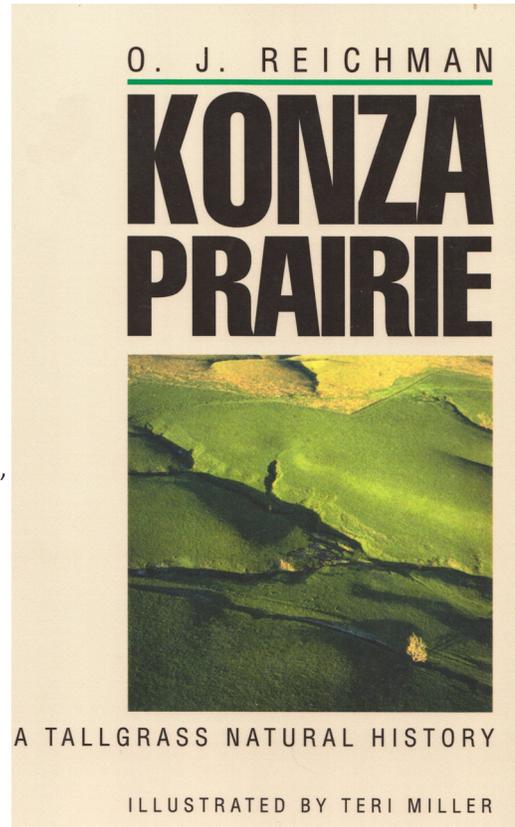
A patch could be a bison wallow, a single butterfly milkweed plant, or a shaded bend in Kings Creek. Patches are the places where the rubber hits the road, where the processes like exchanges of energy and nutrients are played out. Here meadowlarks compete for territory and mates. Here a smaller crayfish holds onto its patch of stream because it got there first. You cannot begin to understand big bluestem unless you look into what is in the patch underground.

***"Most grasses maintain significant underground horizontal stems (called rhizomes) that extend in several directions from the previous year's flowering stalk. During the subsequent growing season, each rhizome can send up a shoot that will develop leaves and, if conditions are appropriate, a flowering stalk. This is very effective in protecting critical tissues and stored resources from being trampled down and consumed by grazers, from being burned, and from being desiccated during unpredictable droughts."*** (pg. 62)

To weave all the complex elements together, the three major habitats are paired in chapters with processes, so we get grasslands paired with photosynthesis and fire, forests with foraging, and streams with competition. The sections on processes are in *italics*, and this physical cue helps to remind the reader that these processes are responsible for the patterns that we see.

Another chapter covers soil and the below ground habitat and is paired with cycles of water and nitrogen. So thanks to his careful planning and research, we can spend happy hours passing through habitats, processes, and microhabitats meeting aphids, deer mice, nitrogen, June beetles, water striders, penstemon, crane fly larvae, hackberry trees, C3 and C4 grasses, eastern gamma grass, *Spirogyra*, red shiners, and mycorrhizae, all in the context of their rich interactions within their respective patches.

(Continued on page 10)



His appreciation of and enthusiasm for the prairie is one of the charms of the book. He carefully crafted the dense descriptions with a dizzying array of verbs, and wove fun facts in to keep the pace brisk and the tone light. Here are a few.

Adult chiggers are mites covered in a red velvet fuzz.

Grasses contain bits of silica that could deter grazers by wearing down their teeth and impeding digestion.

Woodrats share their stick dens with snakes, shrews, insects, spiders, and mites.

The fence enclosing the bison in Kings Creek watershed is about 10 miles long.

Reichman makes this huge subject engaging and dazzling. The drawings by Teri Miller add much to the charm and accessibility of the book. This is a book to keep handy for the occasional refresher before you take a tour out on a bison loop or take the family out for the first spring hike. It's also a great reminder of all that we learn in docent training. And it provides a model for explaining the complexity and beauty of the tallgrass prairie to others.

O.J. Reichman was Director of Konza Prairie from 1993 to 1996.

Diane Barker



Illustrations from the book,  
by Teri Miller



*Eastern woodrats are common residents along stone ledges and in the forests of Konza. They construct*

*elaborate dens by dragging sticks and other accouterments back to a central location. The dens*

*are passed along from generation to generation, with each one adding to the architecture.*

# Patricia Duncan- Early Advocate for Tallgrass Prairie

Cindy Jeffrey



*This past October Patricia was back in Manhattan speaking to the Beach Board of Visitors, guests from the Prairie Studies Initiative, and donors to the Beach and McCain. She also spoke to the Archive and Special Collections staff at Hale Library.*

*While here, I had the opportunity to talk with Patricia about her relationship with the Tallgrass Prairie. It is a deep-seated love going back to her childhood, and even farther. She says it must be genetic. Her father was a Boy Scout Executive, and they moved a lot, and always explored the outdoors of wherever they lived. Her mother's grandfather was part Native American and lived on the High Plains of Texas. After living in Japan with her husband Herb, they settled in Kansas City.*

*The following is part of that interview.*

I happened to read an article by Dr. E. Raymond Hall, a professor of Ecology at KU. He was trying to form an advocacy group for a tallgrass national park. There was great opposition to this. I got an appointment with him and suggested using art to persuade people – he thought I meant illustrations that showed for example how tall the grass was – with a measuring stick. I studied the biology of the prairie from him for about four years.

We got a group of people together with the same passion for the tallgrass prairie, and formed the “Save the Tallgrass Prairie.” Our leader was the inspiring Lawrence Wagner, who also was an attorney and wrote all the bills that were presented to Congress.

At about this time I decided I needed more money to really continue and do the job of photographing the beauty of the prairie and show people why it was worth saving, so I went to the Smithsonian, who had grants for traveling exhibitions. They turned me down, saying they did not give grants to individual artists. They turned me down about three times. My husband got to know Don Hall while designing a building for Hallmark. And they (Hallmark) became my sponsor- this really opened the doors for me especially at the Smithsonian.

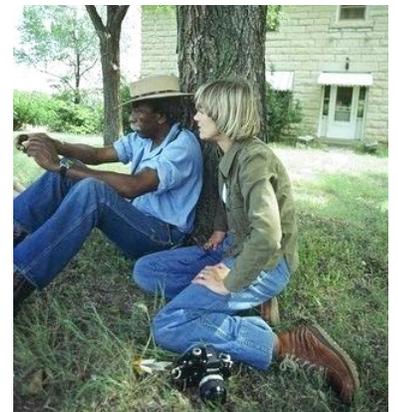
After about 5 years I published a book and over the course of another 2-3 years 40 panels were created for the Smithsonian Institution Traveling Exhibition Service or S.I.T.E.S, “The Tallgrass Prairie, an American Landscape” by Patricia DuBose Duncan. It toured the country for about 10 years. When it was retired the KSU architecture department asked for them and stored them in Seaton. There was no Beach Museum at this time. However, recently the Beach has digitized the panels and will have them available online. The panels now reside in the Riley County Historical Museum. We attracted incredible national publicity such as the NY times and the Today Show, etc. It was an memorable time.

I met Dr. Lloyd Hulbert and somehow he took me in, and showed me his vision for the Konza. I miss him to this day. He gave me a key and I would camp out in a pup tent – an island of orange in a sea of grass – there would be days I never saw another human being. I photographed the Konza. I felt so at home on the prairie. My mother used to say she disliked forests, because you can't see anywhere except up! She was born on the High Plains prairie of western Texas.

The drive to create a Tallgrass National Park took years. I traveled all over Kansas. It was a very tense time – many of the ranchers thought the government was going to take their land, and were very upset about this initiative. Once, when I was driving I was chased, my car bumped from behind. I made it to Olathe Police Station. It was scary.

I got a letter from Life Magazine asking me to escort Gordon Parks around Kansas so he could photograph his birth state. HBO was also doing a documentary about him. And since I knew all the back roads and was a photographer, I would be a good guide. My son and I met him at the airport in KC and for two weeks traveled around Kansas. Once he yelled, “Stop the car, man,” referring to my son who was doing all the driving. He jumped out and over a fence to look at a mulberry tree. He said he hadn't seen one since he was a child. He was writing his novel at the time. So after a day of driving he would write. I never could get him up for a sunrise!

The HBO team wanted to film Gordon riding across the Konza on a horse. I knew the owner of a purebred Arabian stallion nearby. The owner brought the stallion, named “Hazaran” over and saddled him. He whispered to me that the horse was semi-wild and he had concerns about a 60-something man riding him. I was worried! Gordon mounted the saddled horse and they rode together in perfect harmony across the Konza as if they knew each other. It was an unforgettable sight!



*Gordon Parks and Patricia Duncan in front of the Ranch House*

# WINTER

Keystone bison and rock. The history of the prairie is written in the limestone ledges with a vision of an ancient bison herd in the background.



Photo by G. Zolnerowich

## ON THE KONZA

Oaks stand out in winter on Konza. Water and rich soil along the branches of Kings Creek allow an abundance of bur oak.



Photo by Ed Olsen

A handsome prince in velvet. This whitetail deer buck regrows his antlers for the mating season.



Photo by G. Zolnerowich

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#308



Bison & Bluestem is published quarterly by the Friends of Konza Prairie,  
edited by Cindy Jeffrey, 15850 Galilee Rd. Olsburg, KS 66520 or email [cinraney@ksu.edu](mailto:cinraney@ksu.edu)

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