& Bluestem

Bison

2018 Annual Wildflower Walk





When: Sunday, June 3rd - 6:30 pm Where: Konza Prairie Biological Station

NOTE: You will proceed past the entrance to the Nature Trail and enter into the KPBS

headquarters area. Volunteers will be on hand to help direct you.

Cost: \$10/person or free to members of the Friends of Konza Prairie

How far: You can turn around whenever you like, but the whole trail will be

approximately 1.5 miles or 1.5 to 2 hours.

No reservations required - just come out and join us!





Research

Education

Conservation



Upcoming 2018 FOKP & KEEP Events

Mar. 24 - Saturday, "Mashed in the Middle,"

@ Manhattan City Park; 3-6 pm; \$25/ticket, benefits

Jun. 01 - Friday, Docent BBQ and potluck and wildflower walk-through

Jun. 03 - Sunday, FOKP Wildflower Walk

Jun. 11 - 15 - KEEP Summer Teachers' Workshop

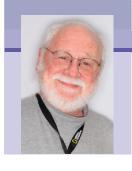
Jun. 22 - Friday, Deadline for photo submissions for FOKP calendar

Aug. 21 - 24 - KEEP autumn docent training

Sept.23 - Sunday, "Konquer the Konza" trail race

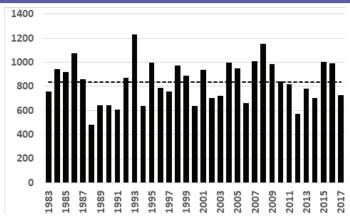
TBD - Fall Annual Meeting / Docent Graduation

FOKP President John Harrington



Your climatologist FOKP President is at it again; playing with the local weather observations to create a climatic sum-

mary. Precipitation data from the Headquarters weather station at the Konza are summarized in the accompanying bar graph as annual totals to provide an indication of year-to-year variation, which is considerable. The 35-year average for the period 1983-2017 (dashed line) of 836 mm translates to 32.9



inches. Low annual totals in 1988 and 2012 are clearly evident, along with the really wet year of 1993 with just over 48 inches. Significant differences from one year to the next are characteristic of the local precipitation climate and organisms need to develop survival mechanisms to tolerate this variability.

In addition, the precipitation climate of the Konza exhibits strong seasonality, with an average of about 70% of the moisture delivery occurring in the six warm season months from April – September. Winters tend to be quite dry, all 18 of the months with less than 5 mm (0.20 inches) in the data record occurred in cold season months. Analysis on a daily basis indicates 75 events with 50 mm (two inches) or more, 17 days that had more than 75 mm, and 5 days with more than 100 mm. The wettest day in the data record is August 9, 2008, with 123.5 mm (4.86 inches). July of 1993 and May of 1995 are the two wettest months in the 35-year data record with 385.8 mm (15.19 inches) and 363.7 mm (14.32 inches), respectively.



Call for Photos for the 2019 Konza Calendar!

It is time to choose the photos you would like to submit to the calendar committee for the 2019 calendar. You are asked to choose five of your very best, high resolution photos that you have taken while on the Konza Prairie Biological Station. Submission criteria include the following:

- 1. Images must be taken on the Konza Prairie Biological Station, and may include landscapes, flora, fauna, or activities at Konza (research, environmental education, etc.) We hope to receive images taken at different seasons on Konza, and we are particularly interested in unique and original subjects.
- 2. Images must be in LANDSCAPE format. The printed calendar will contain photos printed approximately 10 inches horizontal by 7 1/2 inches vertical. Portrait format photos may be considered for use on FOKP note cards. Email photos to jpwatson40763@gmail.com

The deadline for submitting your photos is **Friday, June 22, 2018**. We have had wonderful photos submitted in past years, and we expect some great and beautiful photos this year too. Docents, FOKP members, and faculty/staff are eligible to submit photos. If you have any questions, please contact Jeff or Patti Watson, 740-502-3749 or 740-502-1130 or the email above.

Dr. John Briggs: A Retrospective By Jeff Watson, Konza Docent and Volunteer

When Dr. John Briggs came to Konza Prairie as Director in 2008, he had one major goal: "The challenge, but also the excitement for me, is to balance our research goals with preservation," he said. "I want to preserve native tallgrass prairie habitat, but I also want to conduct experiments and sometimes those things create conflict. We have to balance the needs of different activities."

As he nears retirement in July, he met that challenge and went far beyond his early expectations. I recently sat with John and listened as he reflected on his years at Konza Prairie. It was quite an afternoon.

John's Journey

John has been a part of Konza Prairie for 25 years. He first came to the Konza as part of the LTER project. Those days, when staying on the prairie, "it was like camping out," he says. He stayed in the stone house that was still in need of renovation. He recalled it had no windows and was open to the prairie.

After a period of time in Arizona, he returned as the first full time director. "Being the director was my dream job," he says. He has lived that dream since then.

Of course, he credits several others when he talks of Konza. He said, "What I have done has been built on the accomplishments of those in the past. Lloyd Hulbert envisioned it all. He and others made it work. I just took it from there."

He does not neglect gratefulness and thanks the current and former researchers, volunteers, partners and employees who have worked with him."They all give me the freedom to not micromanage. They are all really good ones," he says.

Changes and Progress

When he first arrived in 1984, almost all of the research was done by KSU faculty and students. Today, over 35% of the researchers are based nationally or internationally. New buildings to house researchers, renovations to the stone house and barn, new equipment, improvements for the burn program and the education program have highlighted his stay at Konza.

Research and Public Learning

John lists one of the areas of greatest change as the access to Konza by the public. Konza hosts more visitors every year, which is both a blessing and a curse. He works hard balancing public access with researcher needs. While having the prairie accessible to the public, he never forgets that Konza's primary function is as a research station.

Modernization is one big advancement of Konza in the last decade. The buildings, equipment, and most of all, the online presence available now, are part of that modernization. Online scheduling and sharing info worldwide has facilitated so much success and extended Konza's reach.

Noting the growth of the educational program, he said, "That program has enabled so many young people to gain respect for the prairie."

The improved ability to communicate effectively may be his major accomplishment. Being online has spread important messages for Konza volunteers to keep the programs going. FOKP has been important in this area as well, particularly in helping to stabilize funding for programs, including the educational efforts.

Next Steps

When asked for what he wished, John didn't hesitate: "Funding has always been my biggest issue, and it just keeps getting more difficult to secure enough funding. A stable funding stream would be so helpful." Increased respect for the prairie is another aspect he would change. He worries that too many people use Konza but don't see how fragile it is. He hopes that can change in the future.

John will leave in July for the shores of Maine. He is looking forward to being bored (so he says; although I find that hard to believe). He has given a lifetime career to Konza Prairie, and he leaves with one final thought, "I am gonna really miss this place."









photos by Barb Van Slyke and Jill Haukos



From the Stone House
Director of Education - Jill Haukos

Loving Your Neighbors?

It's tough living on the prairie. You never know if there will be enough rain or nutrients (nitrogen, phosphorus, potassium) to sustain life. This is especially true if you're a plant. Study plants for long enough, and you'll soon discover that their lives are nowhere near as calm and

gentle as you might assume. Plants employ a host of devices to stay alive: thorns (derived from stem tissue), spines (modified leaves), prickles (modified epidermis and cortex from the stem), nasty-tasting sap (cardiac glycosides in milkweeds are mildly poisonous), and flat-out toxins. Many of these devices are intended to keep the plant from being eaten, and some are used against their neighbors.

Allelopathy (allele = mutual; pathy = harm) is a strategy several prairie grasses employ. Indeed, there's evidence that switchgrass (*Panicum virgatum*) will inhibit some forb growth (e.g., gray-headed coneflower) and Indiangrass (*Sorghastrum nutans*) inhibits milkweed growth, but the biggest player in the allelopathy game is Caucasian bluestem (*Bothriochloa bladhii*). Studies show it inhibits the growth of many of its neighbors, including big bluestem (*Parker*, 2000).

You may have heard of Caucasian bluestem, or Old World bluestem (OWB); it's an introduced range grass that was touted for many years as an ideal range grass that could provide food for cattle on land that was high in pH and low in water. Indeed, it was recommended for those land managers who were enrolled in the Conservation Reserve Program. Well, as is the case for many introduced things – we now have an ecological problem.

Caucasian bluestem prolifically produces many fine, lightweight seeds that are easily wind-dispersed to neighboring fields. These seeds build up in the seed bank of the soil and germinate when conditions become amenable. Once established, these plants then secrete allelopathic toxins that destroy their neighbors. Left to their own devices, the Old World bluestems, like Caucasian bluestem, could completely dominate a prairie and lead to the elimination of the native species.

burn or mow the grass prior to herbicidal application.



During the January Docent Roundup and Awards event, KSU
rangeland ecologist Walt Fick discussed the Caucasian bluestem plague and provided suggestions for how to control this plant. His suggestion was to use imazapyr (trade name Arsenal) as soon as this species was identified and to

Walt noted that the longer the plant is allowed to remain established, the harder it is to treat. If herbicides are not your thing, you can mow the grass, especially before it is allowed to produce seeds. Keep in mind that this grass will produce seeds quickly and frequently, so frequent monitoring and mowing will be necessary.- Jill

Works cited: Fick, Walt. 2018. Old World Bluestem control in Kansas grasslands. https://webapp.agron.ksu.edu/agr social/eu article.throck?article id=643

Parker, Heather N. 2000. The Potential Allelopathic Effect of Several Grass Species on Native Missouri Prairie Plant Species. MSU Graduate Theses.

Assistant Environmental Educator

Retta Kramer

What motivated you to become a Konza Prairie Docent?

When we retired, a good friend and I began walking trails located around central Kansas. Konza quickly became our favorite. As we walked, I had a lot of questions, and soon realized how little I knew about prairie ecology. While looking for answers on the KPBS web page, I found information on the docent training program that was about to start. It offered an amazing opportunity to learn about an area that I had come to cherish; and, it appealed to the retired educator in me by allowing me to continue interacting with young people in a fun, meaningful way.

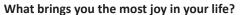
What are some of your interests and hobbies?

I enjoy learning and welcome opportunities to learn something new. I have been working on developing plant ID skills and am starting to take a closer look at identifying birds. I also enjoy taking trips with my husband, nature walks, reading, and working in my yard.

What has been the best part of being a volunteer at Konza Prairie?

I have a list:

- 1) Getting to know the other docents has been great. What a wonderful group of people. I have learned from everyone I have met. I have enjoyed the trail walks and the conversation. I have been attending some of the new docent training sessions. The level of conversation is outstanding. Jill and Hallie do a wonderful job of keeping us organized and providing sharing and learning activities.
- 2) Sharing our love of the prairie with young people and seeing the excitement they have for learning about this amazing place. 3) The multitude of opportunities to keep learning.



I am very grateful for the wonderful family and friends who have blessed my life. My husband, John, and I celebrate 42 years of marriage this year. He, along with our children and 10 grandchildren, keep me focused on the important things in life.



FOKP Bylaws Amended on January 9, 2018

An amendment to Article VI of the FOKP bylaws to reduce the number of ex officio board members was approved by the FOKP Board of Directors at their January 9, 2018, meeting. The amendment removed the ex officio KSU faculty member appointed by the Director of the Konza Prairie Biological Station. The approved amendment to Article VI is:

FOKP shall be governed by a Board of Directors composed of not more than 12 individual elected members and 4 non-voting ex officio members (the Director of the Kansas Chapter of The Nature Conservancy, the Director of KPBS, the KPBS Director of Education, and a member of the KSU Foundation College of Arts & Sciences Development Staff). The President will designate a historian who may be a member of the Board or an honorary board member.

This change is prompted by the retirement of the current ex officio KSU faculty member, Dr. Tony Joern. Dr. John Briggs, KPBS Director, recommended this change to the FOKP bylaws. The FOKP Board proposed the FOKP bylaws be amended to reflect the reduction in the number of ex officio members at their December 5, 2017, meeting.

Friends of Konza Prairie Kansas State University Division of Biology, 116 Ackert Hall Manhattan, KS 66506-4901 785-587-0441 #308



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

2018 New & Renewed FOKP Members

Thank you all for your support of the Friends of Konza Prairie! Members who have newly joined or renewed their membership since the last issue of the Bison & Bluestem include:

Little Bluestem

Leslie Alford & Jim Hood Roger & Gaye Badeker Beth Bailey Diane Barker

George Belin Gary & Mary Breckon Dennis (Buz) Bruzina

Denis M. & Donna M. Callaghan

Larry Campbell Mike & Dru Clarke

Kenneth & Margaret Conrow

Kitra Cooper

Jan Johnson

Herb & Sharon Dillon

Michael Donnelly & Jackie McDonald

Gwen & Dennis Flliott Jack & Peggy Flouer Kevin Fruechting

Charlie & Patricia Grimwood Thomas & Aimee Gross Marty & Sharon Gurtz Dustin & Hallie Hatfield Esther M. Headrick Jim, Mary & Mike Higgins Beverly Holdren Kathleen Hoss-Cruz The Hugo Family Ann Hyde

Bruce & Brigitte Kidder Nancy Withee Knorp Margo Kren Helen & Jim Linger

Dave Manning & Retta McDermott

Jacqueline & Jerry Mershon Ed Olson

Seliesa & Ed Pembleton Robert & Opal Phillips Dwight Platt Paul Post & Kay Kelly David & Sandy Procter

Stephen N. Paige

Cindy Quinlan Ruth & Glenn Rodden

Mary Alice & Norm Schlesener Martha & Dick Seaton Scott Seirer

Mrs. Gladys W. Treichel Nicole Wade Jeff & Patti Watson Deborah Wilkinson

Daniel Swenson

Big Bluestem

Daniel Andresen & family Eldon Ayers BBN Architects Inc. Robert Bechtel & Shelia McAuliffe

Mikeal Brown Jack & Jan Carlson Preston & Diana Chapel Peggy Lynn Crubel Joan Davis & Joseph Haefele

Walter Dodds & Dolly Gudder Dan & Latane Donelin Bill & Ann Feyerharm

Marguerite & Neal Fleming Patrick & Susan Gormely Chod & Sari Hedinger Annette & Steven Huff

Julia Jilek

Michael Kave & Susana Valdovinos Sue Maes & D. Hemmendinger Jay & Doris Merrill

Paul & Nancy Ohlenbusch Charles & Ann Pearce Susan Sevin John Spangler

John & Joan Strickler Marie & Steve Thomas

Flint Hills

Bob Burniston Christeene & Lyle Butler James & Susan Copeland Sandy & Andrew Klein John R. Laffoon Jean & Ronald Lee Larry & Sandy Murphy Pat & Mary Pat Petrie John & Beth Thornton

Prairie Chicken

Christen Skaer Sara Hoestje David & Jennifer Saab Duane & Cindi Dunn

Bison

Alice Bovle **Buttonwood Art Space** The Harrington Family Jim & Susan Koelliker Grant & Toni Milleret Randy Sedlacek & Mary Ventura Holly Serk & Thomas Einck Gaylen Uhlich & Julie Sinclair