

# FOKP Wildflower Walk



Join us Sunday, **June 6, at 6:30 pm** at the stone barn of the Konza Prairie headquarters. Groups of 10 people will be paired with a docent guide to hike the 1.5 mile Butterfly Hill trail (easy hike) at headquarters. You will find up to 50 different blooming wildflowers during this peak time of the spring bloom.

Cost = \$10/person or free for FOKP members.

No reservation necessary, just come out! Proceeds benefit the Friends of Konza Prairie – which works to support the educational program and general operations of Konza Prairie.



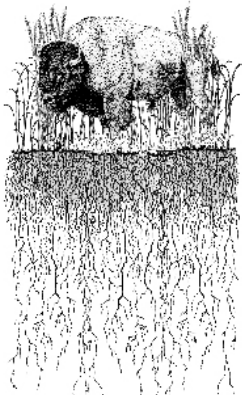
Research

Education

Conservation



SPRING 2021



2021 friends of KONZA prairie

*Whose photos will be in the next calendar?*

## Call for Photos for the 2022 Konza Calendar!

It is time to choose the photos you would like to submit to the calendar committee for the 2022 calendar. You are asked to choose up to 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](mailto:jpwatson40763@gmail.com).

The deadline for submitting your photos is June 21. 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.



## KPBS Director's Report John Blair

Dear Friends of Konza Prairie,

I hope you are enjoying the longer days as we transition from an exceptionally cold February to springtime in the Flint Hills. This spring seems especially bright and full of hope as COVID-19 cases decline. I'm optimistic that this summer will mark the return of many research activities and visitors at the station, and by fall I hope to be able to resume many, if not all, of our education and outreach programs. Of course, this depends on each of us doing what we can to ensure that COVID-19 cases continue to decline, so please follow the advice of local and national health professionals.

Spring also means an increase in prescribed burning in the Flint Hills. As you likely know, fire is essential for maintaining the prairie and a diverse array of plants and animals that rely on an open grassland habitat. Much of the burning in the Flint Hills is done by ranchers that aim to remove accumulated detritus (dead grass) and improve the growth of new and more nutritional grasses for cattle. However, conservationists and land managers also use fire to promote growth of native prairie plants and control the spread of undesirable species, including shrubs and trees that would otherwise degrade prairie habitat. At Konza Prairie, we conduct prescribed burns at different intervals and different times of year to better understand how fire affects all aspects of prairie ecosystems, from birds to bison, grasses to wildflowers, and streams to soil microbes. Many



of the experimental fire treatments on Konza began over 40 years ago, and are now some of the longest running fire experiments in the world!

Spring also means an uptick in usage of the Nature Trail on Konza. We want as many people as possible to experience and enjoy the prairie this way. But it also is important to follow posted rules to ensure visitor safety and to maintain the quality and biodiversity of the site. One critical rule is no smoking anywhere on Konza! Also note that dogs are not allowed on Konza in order to limit impacts on wildlife and research. We also count on your voluntary trail use fees to help with maintaining the trails.

I will close by thanking you, our FOKP members, for your support of the station's research, education, and conservation activities. As always, please feel free to contact me ([jblair@ksu.edu](mailto:jblair@ksu.edu); 785-532-7065) with any questions or concerns about Konza.

## Renewal

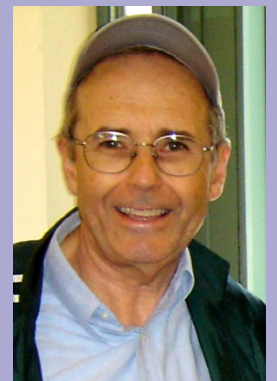
After an unusually cold February and a year of the pandemic, I began to wonder if there would be renewal this spring. The answer was a resounding, "YES!" on both counts.

Retta Kramer renewed the weekly Docent Walk at Konza on March 1 and signs of growth were already appearing less than two weeks after the coldest temperatures since 1983, the spring burning season started, and the first killdeer of the year has returned right on schedule. By the time you are reading this, so many firsts of spring will be everywhere and hopefully the COVID-19 pandemic continues to wane.

I am so excited that in-person activities for FOKP, too, can be renewed soon. The Wildflower Walk, described elsewhere, will provide renewal for you and the public to see the "bouquet" of wildflowers in their full glory. I am excited, too, that I have been able to schedule my first in-person KEEP docent experience with school children in May.

Renewal is all around me and I hope it is for you, too. And be sure to renew your membership for FOKP. It is a great bargain!

## FOKP President Jim Koelliker





## Why do we burn?

It's an annual ritual that many in the Flint Hills anticipate – the onset of spring burning of the prairie. Fires are started deliberately when environmental conditions are conducive and they are set to achieve specific results in the growth of the prairie plants.

A deliberate burn is a “prescription” – meaning that a specific area is burned at a specific time during specific conditions in order to achieve a specific result. The results of the burn will vary depending on the timing of the burn and the conditions in which the burn was achieved. This is why we often refer to these deliberate burns as “prescribed burns”.

### What is achieved with prescribed burning:

**Fire removes standing dead vegetation** – quickly and at a relatively low temperature. Most fires aren't hot enough to burn anything below the level of the soil. Prairie grasses are perennials (come back year after year) and have large storage structures underground (e.g. rhizomes) that store water and food for the new growth of grasses in the spring. Fire does NOT harm any of the underground storage structures of the prairie plants.

The rapid breakdown of the vegetation **releases elements/nutrients (“mineralizes” them)** in a rapid breakdown process that is similar to decomposition. Fire speeds up that mineralization process and makes many elements available to new plant growth. (Note: some elements that are mineralized are carried away in the smoke vapor – “vaporized”. This includes a lot of the nitrogen, and sulfur that were in the standing dead plants)

**Fire can kill small shrubs.** This is especially useful here in the Flint Hills because fire can kill small rough-leaf dogwood, smooth sumac, and eastern red cedar before the plants become too large to resist fire. Fire is a very important tool for the control of these invasive shrubs.

When the standing dead vegetation is burned **it leaves a black char. This char absorbs the light energy** from the sun (black absorbs light, white reflects light) and the ground gets warm. Warm ground stimulates the growth of plants from belowground storage rhizomes.

The open burned area is **better capable of absorbing rain** rather than land covered by standing dead plants. Water soaking into the warm, nutritious soil makes for conditions that allow rapid plant growth.

The grass that grows after a fire has a good supply of water, heat and elements needed for growth, and as a result, there's a lot of **grass that is growing quickly and it's high in nutrition.**

Specifically – grass growing in a burned prairie (vs. grass in unburned):

Leaf nitrogen content increases 41%

(grass has higher protein)

Net photosynthetic rate increases 58%

(grass grows faster)

Shoot mass increases 223%

(there's more grass)

Tiller (grass stem) density increases 110%

(there are more grass stems)

Leaf area index increases 49%

(there are more grass leaves)

Now, we need to consider the potential negative consequences of burning. For example,

impacted air quality from smoke, the loss of cover for ground-nesting birds, and the negative impacts fire has on wildflowers are all considerations that need to be included when anyone plans to burn. Abundant, nutritious grass is desirable if one is seeking to feed grazing animals. However, what if one is seeking to manage for a healthy prairie? That will be the topic for the next newsletter article. - Jill



# Docent Spotlight: Jim Copeland

Jill Haukos



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

What motivated me to become a docent started around 1989. As part of a crew from the KSU Facilities Dept. I had come out to help restore some of the utilities to the Hulbert stone home so it could be used again. My family and I used to go to the Visitors' Day open house every year to enjoy the beautiful open space and learn about Konza and the research projects. I had read about the docent program in the KSU Collegian before I retired from KSU in September 2011 and had made a promise to myself to become a docent and get more involved.

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

My hobbies are reading, walking, and hiking with and without my family, gardening, fishing, caring for our land and stargazing.

## 3. What has been the best part of being a volunteer at Konza prairie?

The best part of being a volunteer is the fellowship I have with my docent friends. I also enjoy time taking out school classes to learn all about the Konza and its wonderful open spaces, which some have never before seen. I also enjoy helping with parking and traffic signaling at the Konza trail races and other events.

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

What brings me the most joy in my life are my family and friends and spending time working and helping my fellow Konza docents.

### The KPBS Staff:

**Director** John Blair, Ph.D.  
**Assistant Director** Eva Horne, Ph.D.  
**Administrative Asst.** Barb Van Slyke  
**Director of Education** Jill Haukos  
**KPBS Project Manager** Jim Larkins  
**KPBS Burn Coordinator** Patrick O'Neal  
**Environmental Educator**

The Friends of Konza Prairie (FOKP) promote the interests of Konza Prairie Biological Station as they pertain to its mission of Research, Education and Conservation. Membership in FOKP is open to all individuals, groups and businesses that share an interest in the common goal of supporting the Konza Prairie Biological Station.

For FOKP membership and general information, call 785-587-0441, or visit the Konza Environmental Education Program (KEEP) website at: <http://keep.konza.ksu.edu> Also, see the back of this issue for a membership form.

### The FOKP Executive Board:

**President** Jim Koelliker  
**Vice President** Brian McCormack  
**Secretary** Lucas Shivers  
**Treasurer** Noah Busch

### The FOKP board members:

Josh Brewer  
Noah Busch  
Retta Kramer  
Brian McCormack  
Marcia Rozell  
Lucas Shivers  
Jeff Watson  
Jerrod Wesfahl  
Kelly Yarbrough

### Ex-officio and Honorary members

The Nature Conservancy- Rob Manes  
KPBS Director- John Blair  
Director of Education- Jill Haukos  
KSU Foundation- Shelley Carver  
Historian- Joe Gelroth  
Honorary Board Members- Stormy Kennedy and Valerie Wright

On Saturday, March 20, 2021, Konza Prairie was host to 300 runners who took part in the first ultra race ever held on Konza Prairie. An “ultra” is defined as any distance longer than a marathon, which is always 26.2 miles in length. The 50K race distance converts to 31 miles, which is not only an ultra distance but also a very difficult ultra on a rocky and hilly trail!

In addition to the 50K race two other distance options were available to runners. They could also choose to run a reasonably short 14K (8.7 miles) or a 20 mile distance. Most of the runners chose the 14K distance, while about 62 people chose to try the 31 mile ultra.

Weather conditions were just about perfect for late March. Morning temperatures were right around 30 degrees with the sun quickly lifting and bringing temps up to the low 60’s by the late afternoon. It was just a bit breezy, especially on the top ridge of the trail, but runners soon turned and went down the slope and were aided with both a tailwind and gravity.

Thanks to Ben Sigle and Trey Vernon of the Manhattan Running Company for organizing the race and giving the proceeds to the Konza Environmental Education Program!

**Big thanks** to the following Konza volunteers:

**Trail traffic directors:**

- Buz Bruzina
- Mike & Connie Butler
- Don Garwood
- Matt Hall
- Katie Haukos
- Chod Hedinger
- Steve Henry (troubadour of the race)
- Mike Jones
- Susan Kamphaus
- Retta Kramer (who wins “warrior of the day” award for sticking it out in the windiest spot without shelter)
- Donna McCallum
- Jeff Peterson
- Ken Stafford
- Jeff & Patti Watson

**Parking volunteers:**

- Jim Koelliker – Master of Parking
- Bill Baack
- Diane Barker
- Jim Copeland
- Don Garwood
- Joe Gelroth
- Julia Jilek
- Jacque Staats



Steve Henry playing for the runners!



Friends of Konza Prairie  
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Division of Biology,  
116 Ackert Hall  
Manhattan, KS 66506-4901  
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#308



MISSION

Konza Prairie Biological Station (KPBS) is a native tallgrass prairie preserve owned by The Nature Conservancy and Kansas State University and operated as a research station by the Division of Biology. The Friends of Konza Prairie (FOKP) promotes the interests of KPBS as they pertain to its mission of research, education and conservation.

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Bison & Bluestem is published by the Friends of Konza Prairie

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## New and Renewing 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  
Karen Barker  
George Belin  
Will Boyer & Darla Allen Boyer  
Gary & Sandra Brase  
Dennis (Buz) Bruzina  
Mike & Dru Clarke  
Veronica Denison  
Caleb Fabrycky  
Carol Garbacik  
Terry & Paula Harbert  
Mark & Terry Healy  
Majka Jankowiak  
Jan Johnson  
Carol Kennedy  
Bruce & Brigitte Kidder  
Margo Kren  
Vera Langemeier  
Bill & Heather Lansdowne  
Ed Olson  
Stephen Paige  
Barbara Peck  
Dwight Platt  
David & Judy Regehr  
Cynthia Rhodes & Brian Martin  
Angela Riedel  
Ruth & Glenn Rodden  
Dan & Bev Rogers  
Mary Alice & Norm Schlesener  
Bob & Elaine Shannon  
Jen Spearie & Otto Chanyakorn  
David Wheaton

### Big Bluestem

Preston & Diana Chapel  
James & Christine Curtis  
Bob & Jan Davis  
Dan & Latane Donelin  
Bill & Ann Feyerharm  
Patrick & Susan Gormely  
Gary & Carolyn Haden  
Tom Hulbert & Nancy Scheer  
Dave Mayer  
Charles & Ann Pearce  
David & Sandy Procter  
Bill & Linda Richter  
Christen Skaer & Luke Carter  
Marianne Wallace  
Jeff & Patti Watson  
Keith & Sheri Westervelt  
Jerrold & Amy Westfahl  
Fred & Judy Works

### Flint Hills

Mary Barkley  
Lyle & Chris Butler  
Walter Dodds & Dolly Gudder  
Marguerite & Neal Fleming  
Joan & Joseph Haeefe  
Megan Kennelly & Kris Silver  
Taylor McFall  
Rod Noble  
Pat & Mary Pat Petrie

### Prairie Chicken

Alice Boyle  
Clay Harvey & Patty McGivern  
Mark Hulbert &  
Merideth Tomlinson  
Civic Plus  
David & Jennifer Saab  
Alan & Joan Smith  
Valerie Wright & Simon Malo

### Bison

James & Susan Copeland  
Allan Foster & Mary Galligan  
Holly Serk & Thomas Einck

### Tall Grass

Meritrust Credit Union  
Jim Koelliker  
Pat & Kelly Landes