



Cure for Cabin Fever

Sunday, February 6, 2022

Come join us **February 6, 2022**, for the annual Cure For Cabin Fever. We are planning on being in the **Stone Barn at the Konza Prairie Biological Station** and are excited that we will again share a variety of soups and breads for our meal.

The schedule is as follows:

2:00 PM- Dave Kendall, Prairie Hollow Productions, will be the speaker. Dave has recently released a video on the history of the Santa Fe Trail. It should be a lively afternoon with Dave as our speaker.

3:00 PM- Feast on the many homemade soups available in the soup buffet. We will have music to complement our meal.

NOTE: Please consider bringing a soup and/or bread to share. I know I missed sampling the many soups available and I am looking forward to again enjoying the soups and fellowship. If you plan to bring a soup, please contact Jeff and Patti Watson at Jpwatson40763@gmail.com or (740) 502-3749.

We hope to see you there.



Research

Education

Conservation



Winter 2022

Calendar of Events

Cure for Cabin Fever Feb. 6, 2022

New Docent Training Feb. 22-Mar. 4 2022

If you've ever been interested in joining the team of docents at the Konza Environmental Education Program, now is the time!

New docent training begins **Tuesday, February 22, and runs from Tuesday to Friday** (9 am - 12 pm) through Friday, March 4th. There is a \$40 registration fee to help defray the costs of training and to pay for training materials. Expect to receive training on: KPBS organization, fire and bison ecology, environmental education and working with groups, grass ID, and a whole host of other topics.

The Konza Environmental Education Program relies on the talents, energy, and enthusiasm of the docent volunteers. Come join our group and help us work with visiting school groups to share with them the wonders of the tallgrass prairie.

Contact Jill Haukos, Director of Education, at (785) 587-0381 or konzaed@ksu.edu for more information.

2022 Friends of Konza Prairie Calendar

The 2022 FOKP calendars are out! You can pick yours up for \$15 each at the Flint Hills Discovery Center gift shop or Claflin Books (103 N 4th St, Manhattan). They make great gifts!





KPBS Director's Report John Blair

Dear Friends of Konza Prairie,

I'm writing this column a few days before Thanksgiving. As we enter a season of thanks and look forward to 2022, I'd like to reflect on the past year and some of the major events of 2021. A major development was the availability of safe and effective COVID-19 vaccines that allowed activities at Konza, and at other field stations around the world, to return to some level of normal. To say that this was a "game-changer" for field stations would be an understatement. Scientists and graduate students from institutions around the country were able to return to Konza to continue research projects put on hold in 2020 and initiate new studies. Busses of school-aged children have returned to Konza for field trips and hands-on science activities this fall. We were able to hold

our spring wildflower walk and annual fall FOKP meeting in person again and provide guided bus tours of Konza and the bison herd. For me personally, it has been great to be teaching my ecology class in person this fall! As vaccination and booster rates continue to climb, I anticipate a continued return towards "normal" in 2022.

We had another successful year maintaining the prescribed fire treatments across Konza. We maintained scheduled winter, spring, and fall prescribed fires on 31 large watershed units and several smaller plot-level experiments. Many of these fire treatments have continued for 40+ years, making Konza Prairie home to one of the longest running fire experiments in the world! The final autumn prescribed burns were completed in early November, and were accompanied by a new group of researchers from Idaho, Colorado, and Nevada who are studying the role of fire in the dispersal of harmful and beneficial plant and soil microbes. We also had a very smooth and successful fall bison round-up. A total of 105 animals were auctioned off to maintain our target herd size and 273 animals were released back onto Konza. Both the fire and grazing treatments are integral to our site-based experimental design and they are one reason that Konza is a destination site for many grassland researchers. None of this would be possible without the skill and dedication of our KPBS staff members and the cadre of trained and experienced volunteers that help maintain these large-scale experimental treatments.

I also want to use this final newsletter of 2021 to thank you for your support as members of the Friends of Konza Prairie. Growth in membership of FOKP and other philanthropic support for the station is increasingly essential for meeting our research, teaching and conservation goals. The current financial situation at K-State has forced budget cuts across campus and Konza is no exception. As a result, we now depend largely on revenue we can generate ourselves (e.g., through bison sales, land-lease agreements, researcher fees, facility rentals, etc.) and on philanthropic support from individuals like you. So, thank you for supporting us! As always, please feel free to contact me (jblair@ksu.edu; 785-532-7065) with any questions or concerns about Konza or to find out more about how you can contribute to our long-term goals.

Dr. John Blair

University Distinguished Professor
Edwin G. Brychta Professor of Biology

FOKP President Brian McCornack



I look forward to serving as president for the Friends of Konza Prairie (FOKP) in 2022, and I'm honored to be a part of such an amazing team of dedicated members, staff, and prairie aficionados! I know some serve because their research or inspiration stems from this invaluable resource. Others serve because they feel it is their duty to make sure the prairie is available to future generations. When I was asked to serve, I didn't hesitate because it was my chance to give back to a place that my family and I now call "home." The prairie continues to connect families, strangers, and scientists from around the world, through shared experiences and data! Some of my fondest memories of my dad is when he and my mom would visit my family, and a hike on the trail was not an option. It was a must! I know we all have stories about how the prairie has impacted our life in one way or the other. It greeted me on my way into town when I interviewed for K-State over 14 years ago, and it reminded me that my love of insects started on a prairie. The landscape changes with the seasons but always felt like home.

I had the pleasure of interviewing several people for a video I created to celebrate the 50th and 25th anniversaries of the Konza Prairie Biological Station (KPBS) and Konza Environmental Education Program (KEEP), which was showcased at the annual meeting. We had a great turnout for the event and the bison on our bus tour did not disappoint! They blocked our path just long enough for the Kansas sun to set and remind us that we are all part of a much bigger story. Jill and her staff have done a remarkable job making sure schools regained access to in-person programs and education this fall, while John has been navigating the current impacts of the pandemic on budgets and longer-term support for KPBS initiatives. We have some ambitious goals for this coming year, and it will require your help. We have an audacious goal of reaching 1,000 members! So, we are asking that "each one, reach one!" We are positive that our current members know someone who is a friend of the Konza Prairie but does not have a membership. We encourage you to reach out and help someone become

a member. Just one! That's all we need from each of you. We hope you're up for the challenge. It's amazing what can happen when we start telling others "why" we choose to be a Friend. We look forward to the year ahead and all its uncertainty. Why? Well, don't underestimate the power of a few, highly energetic, prairie aficionados!



Colors of the Prairie

We all know that the prairie changes colors throughout the year – cycling through:

Gold
Black
Bright, verdant green
Olive green
Back to gold

Two of these color transitions that fascinate me:

1. **The change from bright, verdant green to olive green** happens over the summer, in June and July. The cool-season/early grasses senesce and the warm-season/C4/tallgrasses begin to take over.

2. **The change from olive green to gold** occurs in late September and into October when the tallgrasses senesce and the entire prairie prepares for winter.

Senescence = deterioration of a living thing with age

The process of senescence in the prairie is a fascinating one! The term “senescence” implies death, but the prairie plants don’t actually die, they just look like they’re dead when, in actuality, they’re just going dormant in order to survive the winter.

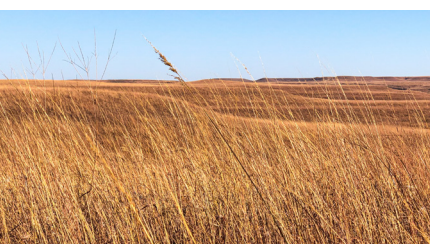
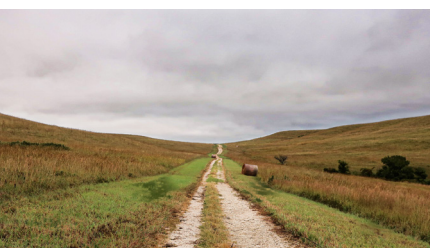
The plants perceive a change in the season and respond to this change by stopping photosynthesis, breaking down proteins and sending important components (nitrogen and simple sugars) to the storage structures, like rhizomes, for underground storage. It’s the equivalent of us canning our food and putting it into the root cellar for use later.

Keep in mind that plants perceive their environment in a way that’s different from how animals perceive their world. Plants don’t have nerves and don’t experience cold or hot. Their environment is water-centric, so they perceive dry or moist and respond to conditions that change the availability of water. Evolution has instilled in plants the need to shut down – for winter – the above-ground processes that need water. That’s because water freezes during the winter and when water freezes, it expands. When water inside a plant cell freezes and expands, it bursts, and kills the plant cell.

So, how do plants know that seasons are changing and that they need to prepare? It’s all about the sun, baby! Plants respond to the changes in total sunlight as a cue for an oncoming change in season. In the autumn the declining amount of sunlight is the primary cue that winter is coming. We all see how plants respond to that – leaf drop from trees and loss of green color from prairie grasses.

Most prairie plants are perennials – about 80% of the species - and they store their nutrients underground during the winter to wait for an increase in light and (hopefully) a good dose of rain in the spring when they’ll again begin their annual cycle of growth and development above ground. Right now, the prairie’s above-ground structures have senesced in preparation for winter, but the below-ground parts are well and truly alive in the remarkable prairie sod.

Many **thanks** to Lucas Shivers for his time as the Newsletter Chair and Josh Brewer for his work with the Merchandise Committee- they are both cycling off the FOKP board at the end of December. Big thanks to Jim Koelliker for serving as President of FOKP in 2021 - we appreciate your direction and leadership!



2021 Konza Rock Stars!

The Konza Prairie Rock Star Award was established in 2018 as the highest award provided for exemplary service and leadership to the Friends of Konza Prairie.

Awardees receive a piece of Konza Prairie itself – a unique piece of limestone from the bison area that is engraved and painted with the Konza Prairie Biological Station logo. No one piece is the same.

The 2021 Konza Rock Star awards were presented at the FOKP Annual Meeting on September 26th.

The awardees were:

Mike Haddock:

Two-term FOKP board member 2006-2011
President-elect in 2010, President in 2011
Long-time guide of the FOKP Wildflower Walk

Chod Hedinger:

Two-term FOKP board member 2007-2012
Past chair of the Merchandise Committee
Long-time leader and coordinator of the prairie chicken tours
Long-time member of the KPBS fire crew

Greg Zolnerowich:

Two-term FOKP board member 2008-2013
Secretary in 2009 and 2010, President-elect in 2011, and President in 2012
Current co-editor of the FOKP Bison and Bluestem newsletter
KPBS Fire crew leader



Past Konza Rock Star Award Recipients:

2018:

Diane Barker
Karen Hummel

2019:

Joe Gelroth
Donna McCallum
Valerie Wright

2020:

Cindy Jeffrey
Stormy Lee Kennedy
Ken Stafford

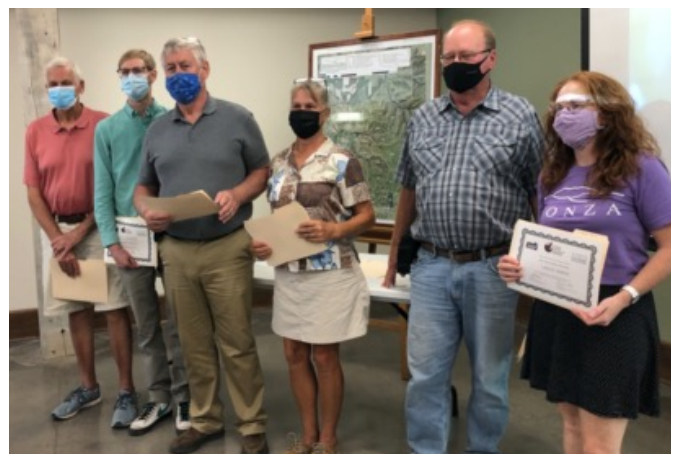
2021 Konza Prairie Chapter of the Kansas Master Naturalist program

A Master Naturalist program is designed to produce volunteers who have knowledge about natural history for a variety of programs or projects within a state. These volunteers then share their knowledge and experience - and sometimes their muscle power/sweat - to help a project fulfill its goals.

The Kansas Master Naturalist (KMN) program was developed by the KSU Research and Extension office with those same goals. The Konza Prairie Chapter of KMN is offered approximately every 3 years with the purpose of providing our docent volunteers with more of the kind of information they crave. Each graduate has fulfilled 40 hours of classroom instruction and 30 hours of volunteer service.

Congratulations to the graduates of the 2021 Konza Prairie Chapter of the Kansas Master Naturalist program:

Jan Butin
Kurt Foley
Don Garwood
Mike Jones
Terry Olson
Jacque Staats
Ken Stafford
Leslie Wren



DAVE KENDALL



In producing this documentary about the Santa Fe Trail, I've learned a lot about the history and impact of the trail. I plan to share a bit of what I learned in my presentation as I also share a few clips from the program. We (Rex Buchanan and I) were pleased to be able to record our interview with historian Jim Sherow out on Konza Prairie with some of the bison grazing in the distance. It was the perfect setting for reflecting upon the lives of those who lived here in the days prior to the trail."

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 Jill Haukos

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 Brian McCornack
Vice President
Secretary Retta Kramer
Treasurer Noah Busch

The FOKP board members:

Susan Adams	(3-yr term expiring Dec. 2024)
Noah Busch	(re-election 3 years Dec. 2020)
Jim Koelliker	(3-yr term expiring Dec. 2022)
Retta Kramer	(3-yr term expiring Dec. 2023)
Tawnie Larson	(3-yr term expiring Dec. 2024)
Brian McCornack	(3-yr term expiring Dec. 2023)
Marcia Rozell	(3-yr term expiring Dec. 2022)
Jeff Watson	(3-yr term expiring Dec. 2022)
Jerrold Westfahl	(3-yr term expiring Dec. 2023)
Kelly Yarbrough	(re-election 3 years Dec. 2020)

Ex-officio and Honorary members

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

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

Bison & Bluestem is published by the Friends of Konza Prairie

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:

Student

Jessica Bilgrad
Hunter Rose
Kristin Taylor

Little Bluestem—Individual

Mary Blubaugh
Mary & Donald Breneman
Steve Coulson
Jonathan Dessi-Olive
Kristen Epps
Sue Carolyn Hunt
Bob Lewis
Lisa Noble
Sue White
Theresa Wolf

Little Bluestem—Family

Mike & Dru Clarke
Don & Karen Garwood
Amanda P Gaulke
Katherine Hummels
Gary & Cindy Jeffrey
Susan & Ray Kamphaus
Bobbie & Dave Kromm
Dennis & Elaine Lang
Tawnie Larson
Carol & David Pacey
Ruth & Glenn Rodden
Rodney & Judith Taylor
Jim & Beth Turtle
Stacey & Jim Warner

Brad & Carol Williamson
Jeff Sackrider & Kelly
Yarbrough

Big Bluestem

BBN Architects Inc
Bill Cutler & Elisabeth Suter
Elizabeth Dodd
Karen Wells & Dan Francke
Stan & Letha Glaum
Lisa J. Grossman
Rob & Toni Gunderson
Mike & Toni Haddock
Thomas & Chris Herald
Mary Jane Hurley
Bryce & Sheena Koehn
Paul & Nancy Ohlenbusch
Terry & Donald Olson
Stephanie Reeck
Susan K. Reimer
Verlyn Richards
Betty CS Sterling
John & Joan Strickler
Michael Stubbs

Flint Hills

Mitch & Susan Adams
Terry & Ginny Arthur
Myron & Nancy Calhoun
Denis & Donna Callaghan
Phil & Irene Jeffries
Julia Jilek

John Laffoon
John & Mary Beth Reese
Ben & Marilyn Tilghman

Prairie Chicken

Civic Plus
Sue Maes & Dennis
Hemmendinger
Ken & Nina Warren
Keith & Sue Ann Wright

Bison

Dan & Beth Bird
Joe & Janette Gelroth
Joe & Anne Jezak
Ken & Kris Stafford

Tallgrass

Brian and Gwen Obermeyer
Mary Vanier

Meritrust

Joshua Affholder
Frances Andersen
Jennifer Anderson
Ruth Bates
Ronald Beat
Samuel Biehn
Sarah Bishop
Ramona Book-Lucas
Teondra Borders
Curistal Briscoe

Traci Brown
Daniel Caine
Christopher Calkins
Sheila Colon Bonilla
Mack Curry
Nancy Danh
Aniyah Davis
Christina Dodson
Brady Dow
JoAnn Furness
Renee Gilbert
Dustin Goehring
Todd Goforth
Angelica Gomez-Santiago
Brandy Hall
Arthur Helvie
Sherry Herring
Claudia Hissong
Sara Hollingsworth
Steven Holub
Paula Hough
Mark James
Julianna Jasso
Caitlin Jones
Colt Jones
Eric King
Najah Kinnebrew
Mark Kirkpatrick
Miranda Kober
Irene Lacharite
Veronica Lafflin
Traci Lee

Altynai Makashova
Alexus Marrs
Matthew Martinez
Jennifer Maxam
Li Miao
Lydia Paxton
Jack Ralston
Crystal Robbins
Sally Savery
Erin Seifert
Brad Sheets
Sandra Simms
David Skinner
Charles Spears
Mandy Sturmer
Barbara Taylor
Eddie Thomas
Kyli Tobias
Shelby Towery
Lasheen Washington
Jessica Watson
Marc Wawrzyniak
Malik White Bear Claws
Shirley Wilson
Lance Yancy