

## EVENTS

Little Prairie Native Plant Garden Planning and Design Workshop  
Saturday April 10, 9–11 AM, Little Prairie Community Garden, Peterson Road and Nigel Drive, Lawrence

Earth Day Celebration at Black Jack Battlefield and Nature Park  
Saturday April 24, 1-4 PM, 163 E 2000 Rd, Wellsville

Black Jack Battlefield Invasive Plant Removal  
Thursday May 6, 5-7 PM, 163 E 2000 Rd, Wellsville

GHF Annual Spring Native Plant Sale  
Saturday May 15 10 AM–2 PM,  
Trinity Episcopal Church, 1101 Vermont St., Lawrence  
Pre-order deadline: May 9

Little Prairie Native Plant Garden Planting Workshop  
Saturday, May 22, 9 AM–12 PM, Little Prairie Community Garden, Peterson Road and Nigel Drive, Lawrence

## IN THIS ISSUE

- P. 2 President's letter
- P. 3 Black Jack and Snyder Updates
- P. 3 Daphne Mayes joins GHF Board
- P. 4 Research Report: Theo Michaels
- P. 7 Donations and thanks



## GHF Native Plant Sale May 15th: Pre-orders Open Now

GHF's 9th Annual Spring Native Plant Sale is almost here! Join us Saturday May 15th from 10 AM to 2 PM at Trinity Episcopal Church in Downtown Lawrence. The sale will be outdoors, with social distancing measures such as limiting the number of patrons into the sale area. We have the most diverse offering of plants yet, with 62 species! Find the species list on the GHF website. All plants are \$3.50 for GHF members placing pre-orders, or \$4 for all on the day of the sale.

We will also have beginner-friendly garden kits available! These kits, one for full sun areas and one for partially shaded areas, have a collection of 6 species (15 plants total) that are staples for native plant gardens and are a fun and easy way to get a native garden started. We also have two booster packs for either milkweeds or grasses, each containing 4 species (8 plants total), great additions to new or existing gardens. The kits will be available the day of the sale only, at limited quantities, priced with a discount.

We are now accepting pre-orders for GHF members through May 9. Pre-orders can be picked up drive-thru style on Friday May 14th from 5 PM- 7 PM or during the sale on Saturday. Members interested in pre-ordering, please send an email to [ghfplantsale@gmail.com](mailto:ghfplantsale@gmail.com), and we will send you the order form. To take advantage of the discounts and the convenience of pre-ordering, you can submit the membership form on p. 7 or join/renew online.

## Little Prairie at Little Prairie Community Garden

We are excited to announce a new project starting this spring! GHF will be installing and maintaining a native plant demonstration garden at Little Prairie Community Garden in Lawrence. We're hosting workshops and documenting the process of how to create a thriving native plant garden. Two community workshops are scheduled for this spring. See details in the events on this page.

Workshops at the garden will include a talk and discussion on native plant garden planning, design, and planting. Attendees will be invited to join us in the garden and practice some of the skills that were discussed. These workshops will be hosted outdoors—bring a lawn chair or a blanket. There will be plenty of space to spread out and maintain adequate social distance, but the number of participants will be limited and RSVP is required.

The demonstration garden will provide an ongoing educational resource. We hope that the garden and workshops will give people confidence in starting their own native plant garden, and information for native gardening success.



**Grassland Heritage Foundation is a non-profit 501(c)(3) membership organization dedicated to prairie preservation and education.**

**GHF News is published three times a year by Grassland Heritage Foundation.**  
**Editor: Andrea Repinsky**  
**adheron@yahoo.com**

**Grassland Heritage Foundation**  
**P.O. Box 394**  
**Shawnee Mission, KS 66201**

**www.grasslandheritage.org**

**grasslandheritage@gmail.com**

**grasslandheritage on Instagram**

### **GHF Officers**

**President: Sue Holcomb**  
**Vice-President: Roxie McGee**  
**Secretary: Mike Campbell**  
**Treasurer: Steve Holcomb**  
**Assistant to the Treasurer:**  
**Kevin Bachkora**

### **Board of Governors**

**Ted Abel, Kansas City**  
**Helen Alexander, Lawrence**  
**Mike Campbell, Eudora**  
**Kathy Denning, Lenexa**  
**Steve Holcomb, Olathe**  
**Sue Holcomb, Olathe**  
**Mary Kowalski, Kansas City**  
**Daphne Mayes, Emporia**  
**Roxie McGee, Lawrence**  
**Randy Rasa, Iola**  
**Andrea Repinsky, Lawrence**  
**Orley "Chip" Taylor, Berryton**  
**Megan Withiam, Lawrence**  
**Joyce Wolf, Lecompton**  
**Ron Wolf, Lecompton**

### **Program Director and Preserve Manager**

**Kaitlyn Ammerlaan**

## **A Note from the President**

I just love Spring! The warmer weather, longer days, and signs of new life everywhere just make me feel good. I especially love to go out looking for spring wildflowers; a sign that even though it's still cold at night, plants are ready to go.

I have a favorite booklet I use during this season. It is *Spring Wildflowers of Missouri State Parks*, written by Bruce Schuette and illustrated by Paul Nelson, published by Missouri Department of Natural Resources. My edition is from January of 1991. The drawings and division by color make it easy to identify plants. Most of the plants are plentiful in Kansas, too. But, of the 43 plants included only a handful are prairie plants. The spring ephemerals in the woods are the most prevalent flowers early in the year. They have evolved to bloom early before the trees leaf out and go dormant during the shady summer.



Blue-eyed grass

In the glades and prairies, where sun is abundant all year, the early plants tend to be very small, as they are not competing with the grasses at this time. On a freshly burned prairie they can be very easy to spot. If last year's growth has been left in place, it is a bit more challenging. And to further complicate the issue, some plants, like Blue-eyed grass, only open their flowers when the sun is shining, not on cloudy days.

One of my favorite places to go is to Shaw's Nature Reserve in Gray Summit, Missouri. It has an amazing array of wildflowers, with bluebells being abundant in the river bottom. (It's also very near my little sister's home, so hiking with her is the best part.) Right now, due to Covid, there is limited entry. But, they created a "Sights and Sounds Trail Series" that is available on YouTube or through their web site. Locally, the Overland Park Arboretum has lots of hiking and wildflowers if you get away from all the sidewalks and planted areas and head towards Wolf Creek on the trails.

And of course, The Prairie Center, which GHF used to own, out in western Olathe, has plenty of trails to hike and woodland wildflowers in the center woody areas. GHF still owns a small parcel near the 135<sup>th</sup> St parking lot, closer to Moonlight Rd. In this area I've found one of my favorite spring prairie flowers, Hoary puccoon, *Lithospermum canescens*; hoary, meaning hairy, and puccoon, a word from Native Americans that meant used as a dye. This is not a native plant that I've found for sale, as the seeds are difficult to locate and germinate.



Hoary puccoon, *Lithospermum canescens*

We don't have any formal hikes planned for The Prairie Center this year, but feel free to email me and we may be able to organize impromptu small groups. Also, if you're further west, our Snyder Prairie near Mayetta is available for visits. The Groundhogs restoration crew will be there the morning of April 17<sup>th</sup>. Plus, our Leadplant Prairie is open adjacent to the Prairie Spirit Trail just south of Welda, KS. Contact us for information on how to visit either site.

Sue Holcomb sholc2003@yahoo.com

## Black Jack Battlefield Restoration Update



After a busy fall of work days to remove invasive black locust and December burns (photo, left) at Black Jack Battlefield outside of Baldwin City, a small crew spread forb seeds during a frigid February day, with a goal of increasing diversity on the site. Roger Boyd of Jayhawk Audubon Society led a birding workshop in March. Next, GHF and partners are hosting an Earth Day Celebration on Saturday, April 24 from 1 to 4 pm, featuring opportunities to plant prairie, help a Kansas Biological Survey research project, and to learn about prairie and prairie management.

## Snyder Prairie Management Tackles the Woodies

This winter has been a busy season at GHF's Snyder Prairie! One of the greatest challenges that we face at Snyder is woody encroachment on our prairie spaces. Thanks to a cost-share program from the State of Kansas, we were able to contract about 9 acres of brush to be mowed and removed from the site. This work has opened up a densely overgrown area, as well as a few edges that threatened one of the most diverse tracts of prairie on the site. In addition to the large scale contractor work, we have been maintaining property boundaries, cleaning up foot trails, and creating a new path

so equipment can have better access. We also were able to safely complete a burn! While most of the property was rested from fire this year, we did burn one field to help knock back some woody vegetation.

Interested in helping out at Snyder? Join the Groundhogs volunteer group on April 17<sup>th</sup> at 9 AM. We will be working on removing brush and trees from the area that was burned this spring. Email Kaitlyn at [grasslandheritage@gmail.com](mailto:grasslandheritage@gmail.com) for more information.

## Daphne Mayes Joins GHF Board

Greetings all! My name is Daphne Mayes, and I'm so excited and honored to be a part of the Grassland Heritage Foundation board. I'm from the Emporia area, and attended high school in Hartford, Kansas where I met my husband Tyson. We have two very active boys that keep us on our toes (ages 2 and 6), and it's been such a humbling and incredible experience to watch them grow and discover the world. A big part of this experience begins with the prairie, appreciating and exploring the wonders that it brings each season. My curiosity for the prairie really sparked while I was halfway across the world, living in a remote village in Zambia, Africa as a Peace Corps volunteer (2009-2011). While there, I worked on a master's thesis examining pollinators in different farming systems. It made me very curious and concerned about the kinds of bees found in the prairies at home.

*Continued p.6*



## Estate Donations Are Making a Difference

GHF is grateful to be one of the recipients of donations from the trusts of Marjorie Brooks Kernick and Andress Kernick, with a portion given in memory of Olive L. Davis Brooks. Their gifts allow us to expand prairie management work that will protect prairie biodiversity, and allow GHF to be prepared to meet future needs. We already purchased new water backpack sprayers for conducting burns, and the GHF board expanded this year's management activities and budget.

Both Marjorie Kernick, who died in 2008, and Andress Kernick, who passed away last March, were from the Kansas City area and both graduated from Kansas University. Marjorie worked in public accountancy for CPA firms in KC and

Ohio. During his 25 years with Westinghouse Electric Corp., Andress Kernick designed power inverters for the Apollo and Space Shuttle programs. He holds 25 U.S. Patents, some of which were used in the Apollo Command Module for NASA, Space Shuttle Orbiter and L-1011 Airbus.

Marjorie was passionate in her support of women's rights, protection of animals, and preservation of prairie. She worked in various volunteer capacities and contributed to their causes. The list of their beneficiaries includes various church entities, medical schools, environmental, and social organizations.



# Forget moving mountains, try moving a prairie: a study in tallgrass prairie resilience

A research report from  
Snyder Scholarship  
recipient Theo Michaels

## All my gratitude

I want to express my deepest gratitude to Grassland Heritage Foundation (GHF) for the scholarship. Not only has this scholarship made it possible for me to pursue my research objectives, but its support also helped provide immeasurable experiences with people in relationship to tallgrass prairie. With this scholarship I was able to purchase supplies needed to grow and plant 1200 prairie plants needed for my research, and fund my summer research trips down to my research sites at Anderson County Prairie Preserve (ACPP). In addition to the 1200 test plants, we collected data on microbial community structure, microbial functions in the soil, and plant community data. In laying the foundation for a multiyear study, this scholarship has helped provide three years of mentorship to the next generation of restoration and conservation scientists and practitioners. This included students from the Doris Duke Conservation Fellows and the Research Experience for Undergraduates programs. During this time, I have also had the honor to work closely with the residents in and around ACPP on research activities and stewardship workdays. My hope is that these research efforts will help us think about how plant-microbial feedbacks influence the resilience of tallgrass prairies and that these findings can be leveraged for regeneration of our post-agricultural lands. Here I share a bit about ACPP and my research. Thank you GHF!

## No way, but the highway

Highway 169 bisects ACPP, fondly known as Welda Prairie. You wouldn't know you were driving through the largest remnant prairie east of Konza Prairie in Kansas because the highway sits down low, such that all you can see is rock made by the body of an ocean thousands of years ago. You wouldn't know unless you understood what to look for at the crest of the rock: Blue Wild Indigo in spring, Blazing Star in summer, the grasses of fall. You wouldn't know if you were someone like me, a transplant from the grasslands of California, new to the perennial endeavor we call tallgrass prairie.

Owned by The Nature Conservancy (TNC) and managed in partnership with the University of Kansas Field Station (KUFS), Welda Prairie sits just north of the small town of Welda, whose post office both serves as a place to mail letters and find out the happenings around town. It is here at Welda Prairie that graduate students like me have the opportunity to study questions about invasive plants, restoration strategies, and carbon sequestration, with the hopes that our research can be used to inform land management practices. But the unique thing about studying these questions down at Welda Prairie is that it is surrounded by a community of ranchers and people who love to ride their bikes along the Prairie Spirit Trail, curious people who are not shy and often

stop to ask what you are up to, and in doing so provide their thoughts about this place, its history and its future.

When I first came to the University of Kansas (KU) in the fall of 2015, Highway 169 was slated for a highway widening project. A well-traveled road without a shoulder, semitrucks were known to end up in ditches and stock ponds alongside the road. However, for Welda Prairie, road construction meant the loss of remnant tallgrass. While the Kansas Department of Transportation (KDOT) worked diligently with TNC and KUFS to mitigate this project, my graduate advisors and I dreamt about how we might leverage this highway widening project in a way that would help save some of the prairie, facilitate restoration, and learn something about the workings of tallgrass prairie resilience.

But how would we do this? Our answer: Move the prairie.



Tree spade moving monoliths. Photo: Theo Michaels

## An experiment in resilience

As a graduate researcher at KU, I am interested in working landscapes and the mechanisms that govern tallgrass prairie resilience. Tallgrass prairies are increasingly surrounded by intensified human land use. While we often manage native prairies and agricultural lands as separate landscapes, we do not know very much about how these adjacent lands may interact with one another across property lines. Understanding to what degree these lands interact with one another has important implications for tallgrass prairie resilience and recovery. While we often examine and evaluate resilience from an aboveground perspective, I am interested in understanding how plant-microbial relationships may affect grassland resilience. In a similar way that humans have a microbiome that helps digest our food, regulate our immune systems and protects us against diseases, ecosystems also have their own

plant-microbiome relationships that helps maintain and drive specific functions. In this patchwork of native prairie and human modified lands that we call Kansas, plant-microbial relationships from these desperate systems may interact with one another in ways that could either lead to the spread and recovery of prairies or result in their decay. Understanding these relationships is where I come in. I am specifically interested in the mechanism that maintains or erode prairie resilience and how this information may be used to restore post agricultural lands.

For better or worse, the highway widening project lent itself to testing these questions about tallgrass prairie resilience. To do this, we indeed moved the prairie. As you can imagine this was no easy task. Lucky for us, we were able to find James, his careful skill, and his truck mounted tree spade. In the winter of 2017, after a trial run, James set about transplanting 390 tallgrass prairie monoliths that were 1.5 meters wide by 1.5 meters deep, into our experimental design. One of the marvels about these prairie monoliths is that they are like mini prairie ecosystems, each with their own plant and microbial community, and soil environments. Knowing this, the monoliths were strategically configured into small, medium and large patch sizes to consider how the collective strength of plant-microbial relationships might influence tallgrass prairie resilience or decay.



Theo Michaels, with a test monolith in the prairie. The monolith in the picture is from the old field.. Photo: Dean Kettle

In these patch configurations, the prairie monoliths were transplanted into three fields at Welda Prairie, which I refer to as recipient sites. These recipient sites each have their own unique history. There is the *restored field*. Once an agricultural site, this field had the terraces removed and was

seeded with prairie species. Like many restorations, it is mostly dominated by prairie grasses and a few wildflower species. Then there is the *old field*, what ranchers would call a *go-back* field. This is a post-agriculture field that has not been actively restored. It is a mixture of cool season grasses, native prairie plants, woody tree encroachment, and under the vegetation you can still see notice the contours of the terraces. The third field is what I call the *disked field*. This field was similar to the old field, until we decided to run a disk through it just prior to the monolith transplant. We did this to mimic a more recent agricultural disturbance. In this way, the recipient sites represent different degrees of disturbance and restoration effort.

Together these recipient sites and prairie monoliths offer up something really important: adjacent systems each governed by their own plant-microbiome relationships with the potential of these systems to interact with one another. As I mentioned, part of my interest in tallgrass prairie resilience is understanding how the interaction of plant-microbial relationships between the prairie monoliths and the recipient site can facilitate the spread of the monoliths or lead to their decay. Compared to post-agricultural fields and early successional stages often associated with our restoration efforts, late successional prairie species are highly dependent on mutualistic relationships with arbuscular mycorrhizal (AM) fungi. In exchange for carbon from the plants, these fungi provide enhance access to nutrients and water, as well as defense against pathogens, among other benefits.

To examine the role of these relationships in the spread or decay of the prairie monoliths, we planted sterile test plants, or, plants grown without a microbiome. These test plants were planted inside, adjacent to, and 4 meters from the monoliths. Because these plants were sterile and grown in the absence of a microbial community, we expected their survival and growth response to act as indicators of the local microbial community presence and composition and in turn, highlight the strength and direction of plant-microbial relationships. We used Black-eyed Susan (*Rudbeckia hirta*), an early successional species that has been shown to be less dependent on AM fungi and tends to thrive in disturbed sites. We also used Blazing Star (*Liatris pycnostachya*), a late successional species known to be highly dependent on AM fungi. Given the plants' differing dependence on microbial communities, particularly AM fungi, we expect differential survival and growth responses depending on the successional stage of our test plant and its location with relationship to the monolith. In all, we planted 600 of each test plant species, for a total of 1,200 plants.

Over the last three years and counting we have collected data on these test plants. Each year, we take data on survival, leaf number and height. If the plant has bolted, we take data on bolting height, and number of flowers or inflorescence, depending on the species. In doing so, we have found early



evidence that plant-microbial relationships of the prairie monoliths may structure tallgrass prairie resilience and help facilitate monolith spread. Importantly, the strength of these plant-microbial relationships of the prairie monoliths appears to be modified to some degree by the recipient site. For instance, survival of Black-eyed Susan, our early successional test plant, was greater when it was planted in the disked and old fields, our most disturbed sites. In these sites, survival was lowest when planted inside of the monolith, and increased with distance from the monoliths. Black-eyed Susan survival was so low in the restored field that we did not have enough data to analyze the results. However, we might expect this given that this was our least disturbed site, more closely mirroring the prairie monoliths. Combined, these



*A prairie monolith in spring, located in the restored field. Notice the plant diversity in the monolith as compared to its recipient site. Photo: T. Michaels*

data tell us that plant-microbial relationships were stronger in the prairie monoliths, and even more so in the restoration site, suggesting monolith resilience.

The data collected for Blazing Star, our late successional test plant, helps reinforce these insights, and enhances our understanding of the degree to which the recipient sites may be influencing the stability of the prairie monoliths. Overall, Blazing Star survival was greatest at locations adjacent to the monoliths, suggesting the spread of plant-microbial relationships from the prairie monoliths. Interestingly however, survival for Blazing Star grown at locations inside of the mono-

liths was inconsistent across recipient sites. Here we see that survival mirrors the disturbance trajectory of the recipient sites; survival is greatest in the restored field but significantly lower in the disked field. This suggests that while plant-soil relationships of the monoliths may be spreading, over time monolith resilience may be more vulnerable to decay in the disked field. It will be interesting how these relationships change with time. It is my hope that when I have completed my data analysis, we will have a better understanding of the mechanism governing tallgrass prairie resilience. I hope to illuminate the conditions under which plant-soil-microbial relationships maintain or erode grassland resilience and how we might leverage this understanding to enhance prairie restoration.

### Monoliths as metaphor

On my drive home from Welda Prairie, I pass by what are now familiar landscapes I hold with great affection: fields planted with corn, the grazed pastures, parcels of remnant prairie that reflect the fortunes of prescribed burns. These days, I think a lot about the vulnerability of our Kansas lands. As a resilience ecologist, I use data to help tell the story of these lands, but I also know that building adaptive capacity stems from the relationships we have with place and with each other. The monoliths have come to serve as a metaphor for me for how we might think about working with our lands. With each year, I see how the monoliths are interacting, or not, with their recipient site. Depending on the recipient site, this interaction could be to the detriment of the monolith, or the benefit of the recipient site. Sometimes the data tells me that each resists the other. So how do we manage not just within, but across our landscapes? How do we come to understand that what we do on one side of the fence might impact what happens on the other? How can we manage across landscapes to build in adaptive capacity and resilience, especially in this world that seems increasingly vulnerable? And in this how do we support each other in cultivating our relationships with place? From the monoliths I have learned that humans leave their mark. We always do. We just have to decide what type of mark we want this to be and that this mark has the capacity to change with relationships we seek to cultivate with reciprocity and intention.

To learn more, contact Theo at [tmichaels@ku.edu](mailto:tmichaels@ku.edu)

## Daphne Mayes, continued

After finishing Peace Corps and the master's degree program at the University of Wisconsin-Stevens Point, I continued my studies at the University of Kansas examining bees in tallgrass prairie remnants and restorations as part of my dissertation research. Part of this research was generously supported by the Grassland Heritage Foundation's Rachel Snyder Memorial scholarship. I finished my PhD in the spring

of 2019, and since that time have moved back to Emporia and have been helping my son with his remote learning. I also continue to do outreach as a Xerces Society Ambassador, where I have mostly focused on educating the public about the importance of wild bees. A big part of conserving bees is protecting and restoring their habitat, and prairie restoration and conservation goes hand in hand with those efforts here. I am eager to work with the Grassland Heritage Foundation on this important mission in the years to come!

## We depend on your contributions!

Please help GHF protect prairie by sending your donation today.

The date of your last contribution is printed above your name on the mailing label.

Contribute online or send this form to: Grassland Heritage Foundation, PO Box 394, Shawnee Mission, KS 66201

Membership Categories: ☐ \$20 Friend ☐ \$35 Family ☐ \$50 Steward ☐ \$100 Sustaining ☐ \$250 Conserver  
☐ \$500 Patron ☐ \$1000 Benefactor ☐ \$5000 Founder ☐ \$15 Student/Retiree

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

☐ Save postage/printing and email my PDF newsletter **OR** ☐ Send my printed newsletter to the above address

☐ Contact me about volunteering

☐ Gift in *honor* or *memory* of (mark which) \_\_\_\_\_

Your contribution will support prairie conservation in the general fund unless you designate your donation for:

- ☐ Scholarship Fund
- ☐ Prairie Protection
- ☐ Education Programs
- ☐ Prairie Management

**Membership renewals and  
donations can also be sent  
to GHF online at  
[www.grasslandheritage.org](http://www.grasslandheritage.org)**



## Donations Since December 2020

Thank you to all who gave through the Lordi Marker Match for Monarch Management! We fulfilled the full match amount of \$10,000 and habitat improvement work has begun.

**Facebook Giving Tuesday donors:** Jesse Belt, Sarah Bier, Susan Lawson, Erik Ammerlaan, Mercy Ammerlaan

**New Members:** Bob Broyles (Birds, Bees and Butterflies Nursery, LLC), Nova Clarke, Karen Glaser, Kendra Harnden, Lesley Hayward, Marie Hunter, Jean Janecek, Peter Muraski, Michael Peterson, Ian Roberts, The Roost, Kim Rutter, William & Cynthia Seifert, Hope Steinle, Clint Thrasher, Pat & Kathy Webb, Megan Withiam

**Returning members:** Joanne Berns, Trish Bransky, Sheryl Geisler, Jane Hanni, Joan Kenny, Darla Mitchell, Stephen Paige, Kathy Porsch, Cynthia Pederson

### Land Management Fund Donations

Frank Norman

### Prairie Protection Fund Donations

Jan Butin  
 Karen Glaser *In Memory of Alfred Wiesner*  
 David & Michelle Gundy  
 Half-Giant Corporation  
 Courtney Masterson

Cathy Reinhardt *In Memory of Rex Powell*  
 William & Cynthia Seifert *In Memory of Dr. Gary Tegtmeier*  
 D.A. Small  
 Hope Steinle

### Prairie Education Fund Donations

Douglas May, Stephen Paige

### General Fund Donations

Elizabeth Marshall *In Memory of Richard Marshall*  
 Kimberly Patterson *In Memory of Bill Thiesen*  
 Cynthia Pederson *In memory of Ronald M Pederson*  
 Ian Roberts *In Honor of Jean Madden*  
 Margaret Rose *In Honor of Arnold Feinberg & Diana Dunkley*  
 Ann Simpson *In Memory of Gary Tegtmeier*  
 David L. Wagner *In Memory of Larry Wagner*

## 'Thank You' to:

Roger Boyd for leading our March 21 bird walk at Black Jack Battlefield

Black Jack restoration volunteers and partners

Spring plant sale committee: Roxie McGee, Ken Tillery, Mary Kowalski, Steve & Sue Holcomb

Kevin Bachkora for GHF's monthly financial statements

**Grassland Heritage Foundation**  
**PO Box 394**  
**Shawnee Mission, KS 66201**

Non-Profit Organization

US POSTAGE PAID

Olathe, KS

Permit No. 309


**Return Service Requested**

*Your last contribution was made:*

To receive your newsletter in pdf form by email, contact Sue Holcomb at [sholc2003@yahoo.com](mailto:sholc2003@yahoo.com) or (913) 856-4784.  
Enjoy your newsletter in full color on our website: [www.grasslandheritage.org](http://www.grasslandheritage.org).




Printed on Recycled Paper



**EARTH DAY CELEBRATION**  
**SATURDAY, APRIL 24TH, 2021**  
**1 PM- 4 PM**  
**BLACK JACK BATTLEFIELD AND NATURE PARK**  
**163 E 2000 RD, WELLSVILLE, KS 66092**

Join us at Black Jack Battlefield for a celebration of all things prairie! GHF is hosting a day of hands-on fun and educational activities. Plant inoculated plants for a Kansas Biological Survey research project studying the effects of mycorrhizal fungi on prairie restoration. Learn how to identify and remove invasive plants!

This event will be held outdoors, and masks are required! More information is at [www.grasslandheritage.org/blackjack](http://www.grasslandheritage.org/blackjack).



Logos of partner organizations: Grassland Heritage Foundation, Native Lands, Kansas Biological Survey, Black Jack Battlefield, and Douglas County.



**NATIVE PLANT GARDEN PLANNING  
AND DESIGN WORKSHOP**  
**SATURDAY, APRIL 10TH, 2021**  
**9 AM TO 11 AM**  
**LITTLE PRAIRIE COMMUNITY GARDEN**  
**PETERSON ROAD AND NIGEL DRIVE, LAWRENCE, KS 66049**



**NATIVE PLANT GARDEN PLANTING  
WORKSHOP**  
**SATURDAY, MAY 22ND, 2021**  
**9 AM TO 12 PM**  
**LITTLE PRAIRIE COMMUNITY GARDEN**  
**PETERSON ROAD AND NIGEL DRIVE, LAWRENCE, KS 66049**