

## Upcoming Events



### **Kansas City WildLands 15<sup>th</sup> Annual Red Cedar Christmas Tree Event**

Saturday, December 12, 2015 from 10:00 AM to 3:00 PM

Mildale Farm – a JCPRD site – 35250 W 199th St, Edgerton, KS 66021

<https://www.bridgingthegap.org/get-a-native-cedar-christmas-tree-with-kc-wildlands/>

Bring your saw and cut your own red cedar, just like the old days.

For more information, contact Linda Lehrbaum at 816-561-1061, ext. 116 or [linda@bridgingthegap.org](mailto:linda@bridgingthegap.org).

### **GHF Christmas Potluck Party**

Sunday, December 13, 2015 at 6:00 PM

26062 W 150th St, Olathe, KS 66061



Sue & Steve Holcomb will once again host a holiday gathering at their home for board members, volunteers, and their guests. Sue will make different chilis and invites everyone to bring items to share for our potluck; appetizers, veggies, cheese, crackers to go with chili, desserts, and wine, beer and other beverages are welcome. Contact the Holcombs at 913-856-4784 or [sholc2003@yahoo.com](mailto:sholc2003@yahoo.com) to let them know you're coming and what you plan to bring.

### **Annual Kaw Valley Eagles Day**

Saturday, January 23, 2016 from 9:00 AM to 4:00 PM Free

Free State High School 4700 Overland Drive Lawrence, KS 66049

<http://www.kawvalleyeaglesday.com/>



Come celebrate the bald eagle! It's an event for the whole family, featuring lots of hands-on educational and fun activities for kids. Viewing opportunities at Clinton Lake.

### **Grassland Heritage Foundation Annual Meeting**

Saturday, January 30, 2016 from 9:00 AM to 3:00 PM

Higuchi Hall, 2101 Constant Ave, KU West Campus, Lawrence, Kansas

The Board of Governors will hold elections, conduct the required business, and do some long-range planning. We hope to spend time deciding our goals for the year and implementing our vision and mission. If you're interested in joining us, please contact Kim Bellemere at 785-840-8104 or [grasslandheritage@gmail.com](mailto:grasslandheritage@gmail.com). Volunteers are always welcome!



### **7th Annual Kaw Valley Seed Fair**

Saturday, February 13, 2016 from 9:00 AM to 3:00 PM FREE

Douglas County 4-H Fairgrounds Bldg 21, 2110 Harper St, Lawrence, Kansas, 66044

GHF will promote the use of native plants at this seed exchange and informational fair. Includes environmental info, seed saving workshops and children's activities. [www.facebook.com/kawvalleyseeds](https://www.facebook.com/kawvalleyseeds)



## President's Column

Please join me in giving financial support to GHF's good work protecting the tallgrass prairie in northeast Kansas!

As our annual report shows, GHF has had a productive 2015. We've reached a lot of people and diverse audiences, including prairie landowners wanting to protect their prairie biodiversity through good management, landowners planning prairie restoration, butterfly and prairie enthusiasts establishing yard plantings, new and experienced prairie explorers, educators, students, and artists inspired by the beautiful, complex, diverse prairie.

The annual report also shows that we're spending more than what we bring in from donations in a few work areas. Your donation can help balance the budget and ensure the long-term health of GHF. Then, we need to GROW! So much good work is being done for the prairie, but there always seems to be more to do, more students to teach, and more landowner services to offer. Our Education and Membership Coordinator, Kim Bellemere, accomplishes a lot with the hours we fund her position, and she has great aspirations to do things like increase our school programming. I'd like to have the resources to fund additional hours of her time. Also, our Preserve Manager, Frank Norman, helps people get onto the prairie, helping with and learning about land management, with our Groundhogs monthly volunteer work days. Your donation of \$300 can sponsor one day of Groundhogs prairie restoration work.

I sincerely thank all of you who, with your donations, time, and hard work, join GHF in this worthy endeavor.

Andrea Repinsky      adheron@yahoo.com



Our Roulund-Wagner Prairie adjacent to the Prairie Center after the state mowed to control invasive plants in November. You can see the tall Indian grass in the foreground. The Holcombs have been mowing the shady areas and working to help this area in its succession back to prairie.

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.

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Email Address:  
grasslandheritage@gmail.com

## GHF Nominating Committee

The GHF Nominating Committee will be meeting in preparation for our Annual Meeting. We always welcome new members to our Board of Governors and those willing to serve as officers or other volunteers. If we haven't contacted you, please be sure to contact our president, Andrea Repinsky and let us know your interest.

## Groundhogs

Human intervention is needed to keep prairie remnants as prairie. Our Groundhogs group does this work at our own Snyder Prairie about 20 miles north of Topeka. We always need volunteers for work ranging from cutting trees, lopping woodies, collecting seeds, hauling cuttings off the prairie, etc. We don't meet in December, but will meet on the 3rd Saturdays of January, February, and March.

Contact **Frank Norman** at 785-691-9748 or fjnoman@sunflower.com to get on the volunteer list and be informed of work day activities. **Please don't show up without contacting us, as we may need to cancel on a given workday.** Always dress for the prairie with long pants, gloves, a hat, and sturdy shoes or boots, and bring along water.



## Volunteer Opportunities

Kim Bellemere, our membership and education coordinator, organizes GHF's booth and needs help from area members to staff and visit with people about GHF at area events. Call her at 785-840-8104 or email grasslandheritage@gmail.com if you can assist or would like to volunteer in some other way.

## Annual Report Fiscal Year 2014 (September 1, 2014 to August 31, 2015)

2014-2015 was an exciting year for GHF! Some of last year's highlights include:

### Membership and Education

We hosted basketry workshops with Wade Myslivy, helped sponsor presentations by Douglas Tallamy (author of *Bringing Nature Home*) and on the growing threat of invasive Old World Bluestems, and we continued to present educational programs for children. We were thrilled to see the attendance at some of our events grow by leaps and bounds, which tells us that people want to learn more about prairies and their role in preservation.

### 3<sup>rd</sup> Annual Native Plant Sale

We made a few important changes to the 2015 plant sale. In the past, we held the sale at the Lawrence Earth Day Celebration in April. Hosting the sale so early is challenging as many of the plants simply aren't big enough to sell at that time, so we moved it to May and held it at the Lawrence Public Library lawn. The changes were good ones! The 2015 sale was our largest yet, the plants (supplied by Applied Ecological Services in Baldwin City) looked fantastic, and we had a crowd waiting for us to open. The plant sale is the only fundraiser hosted by GHF every year and while the funds raised are beneficial, it's also a great opportunity for people to learn about the importance of landscaping with native plants. We're looking forward to another successful sale in 2016.

### Change for our Community



GHF was the recipient organization for The Community Mercantile's (The Merc) Change for our Community program in August. Each month, a different organization is chosen to receive the proceeds from donations and bag refunds. Not only did we raise almost \$1,500 for our educational and preservation projects, we raised awareness about our programs and our mission to preserve prairie in NE Kansas. We want to thank The Merc for selecting us for the program!

### Restoration Workshops and Walks

GHF worked with three new partners this year to host a number of very successful activities. In the spring, we partnered with the Douglas County Conservation District to host a 3-part workshop series on prairie restoration. The workshops were designed to help small landowners prepare and complete a restoration project then understand the basics of managing their newly restored prairie. The series culminated with a tour of two Douglas County properties with native and restored prairies.

In August, GHF also co-hosted a tour of the prairie restoration at Free State High School (FSHS) in Lawrence. The Free

State Prairie is a joint project of FSHS and the University of Kansas Dept. of Ecology and Evolutionary Biology and provides opportunities for students from both schools to conduct research and learn about the prairie ecosystem.



The Free State Prairie is a joint project of Free State High School and the University of Kansas Dept. of Ecology and Evolutionary Biology

The turnout for all of these events was fantastic with over 100 people attending each of the workshops and the Free State Prairie Walk. Our own Prairie Discovery Day at Snyder Prairie in September welcomed another 25 people to learn about our preservation and restoration efforts at our own prairie from our property manager, Frank Norman. We're excited that so many people are interested in restoration and we're looking forward to hosting more events like these in the future.



Frank talking to the crowd before the Prairie Discovery Day walk

### Rachel Snyder Memorial Scholarship

GHF did not award a scholarship in 2015, but thanks to last year's contribution by Susan Lordi Marker, we plan to do so next year. Check out the article in this edition by Kathy Rocafort Denning, who twice has received money for her research on pollinators and who we've been happy to host at Snyder Prairie.

### Educational Activities by the numbers

# of educational events attended or hosted by GHF	19
# of volunteer hours contributed	75
# of Children and adults participating in our outreach activities	~1350



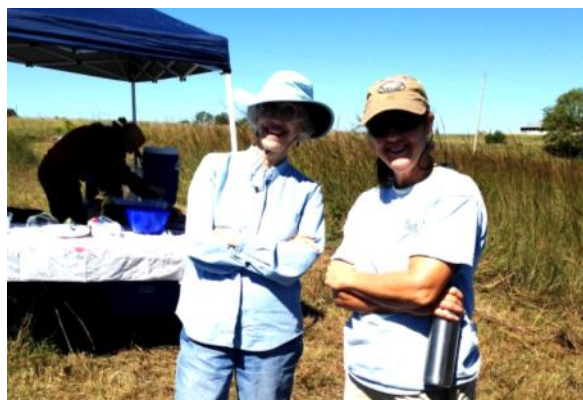
## Annual Report continued...

### Snyder Prairie Restoration

During Fiscal Year 2014, Groundhogs (GHF's prairie restoration volunteers who meet the 3<sup>rd</sup> Saturday of each month except December) contributed a total of 62 volunteer hours over 6 Saturdays to cut brush and pile debris, assist in spring prescribed burns, control invasive plants (e.g., sericea lespedeza, red cedar, rough-leaved dogwood, garlic mustard, and musk thistle), and collect and broadcast native prairie seeds. Most of the activities were conducted with the goal to make haying possible in more areas of the property. This year, Bruce Yonke, GHF subcontractor, continued his efforts with brushing, invasive weed control, and assisting with prescribed burns.

Groundhogs, led by Frank Norman, were joined by one new, Sharon Ashworth and numerous returning volunteers including Myron Leinwetter, Ted Abel, Gary Tegtmeier, Dale Nimz, Melvin Depperschmidt, John Flavin, Andrea Repinsky, Brian Roh, Sierra Barron, and Tandy.

In 2016, Groundhogs will continue with similar efforts described above, as will Bruce Yonke. Plus, he will continue with haying efforts after a respite in 2015. Our contracted and volunteer efforts are all aimed at maintaining the native prairie, improving the quality of restored prairie, and reducing the extent of woody encroachment on the property.



Beth Schultz and Sharon Ashworth at PDD.

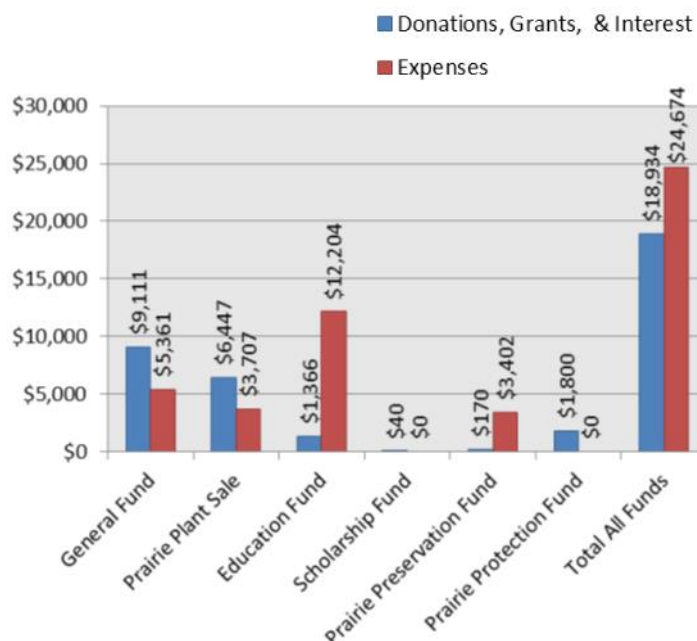
Sharon helped with the Groundhogs in the morning and Beth helped set up for lunch (even though we told her she didn't have to!).



Kathleen Nuckolls and her daughters. She promised them that they could picnic in the tallgrass like she did when she was a kid.

### Financial Summary of Income and Expenses for Fiscal Year Ending August 31, 2015

Thanks to the generous bequest made in memory of Marjorie Brooks Kernick and her mother, Olive Lodoska Davis Brooks, in 2008, we have had the financial luxury to contract some of the work that we have a hard time finding volunteers to accomplish. This past year we also received contributions in memory of Philip Kimball of Lawrence. The summary of this fiscal year appears below thanks to Steve Holcomb, Treasurer.



### Who we are

#### Board of Directors

Andrea Repinsky – President  
 Megan Withiam – Vice-President  
 Sue Holcomb – Secretary  
 Steve Holcomb – Treasurer  
 Angie Babbit  
 Mike Campbell  
 Jennifer Dropkin  
 Jeff Hansen  
 Rex Powell  
 Chip Taylor  
 Gary Tegtmeier  
 Jonathan Wilson  
 Joyce Wolf

#### Assistants to the Treasurer

Ann Simpson and Kevin Bachkora

#### Contractors

Frank Norman – Snyder Prairie Preserve Manager  
 Kim Bellemere – Membership and Education Coordinator

*Annual Report continued...***Financial Contributors for the Fiscal year starting Sept. 1, 2014**

The following members contributed during the last year. This does not include life-time members, members who paid for multiple years on a previous occasion, or any of the many volunteers who give of their time and talents and don't necessarily make a monetary contribution. If you believe we've inadvertently left off your name, please contact Sue Holcomb, 913-856-4784 or sholc2003@yahoo.com. Thank you!!!

Ted Able	Kelly Haller	The Merc	Sandy Sanders
Kevin and Angie Babbitt	Mary Haskin	Mike, Pam, and Lia Miller	Sally Sanko
Robert G. Barnhardt, Jr.	Ron and Ann Hendel	Brian Monberg	Dr. Artie Shaw
Grace Beam	Jean Hiersteiner	Michael Morley	Ronald L. Sisk
Sue Beamer	Jim Hillesheim	Wayne Morton	Madonna Stallmann
Malcomb Beck	Jamie Hofling	Lisa Nelick	Ruth Stepien
Joanne Berns	Steve & Sue Holcomb	Conni Nevius	Betty Sterling
Jarold and Barbara Boettcher	Steve & Helen Horton	Kenneth & Gayle Nicolay	Al & Linda Storms
Deborak Borek	Carole Hunter	Stan and Sandy Nolind	Toni and Chip Taylor
Richard A. Brune	Jerry Jost	Stephen Paige	Gary Tegtmeier
Mike and Julie Campbell	Kelly Kindscher	Elizabeth Patton	Sandra Tholen
Fred and Nancy Coombs	Mary Kowalski	Paul Post and Kay Kelly	Ken Tillery
Mary Cottom	Carol and Dave Kyner	Alexis Powell	Kirk Vaughan
Bruce and Lucy Cutler	Marie Alice L'Heureux	Rex Powell	David L. Wagner
Daniel Dannenberg	Carol Larson	Catherine Reed	Martha Wagner
Carol Fields and Charles	Myron Leinwetter	Andrea Repinsky	Joan Wagstaff
Downing	Cathy W. Lewis	Joyce Resnick	Ron and Joyce Wolf
Julie Elfving	A.J. Loscalzo	Margaret Rose	Rita and David Wristen
Roger and Virginia Emley	Kail Marie	Janet Roth	
Craig and Jane Freeman	Roxie McGee	Byril J. Sanders	

**Pollinators' Perspectives on Tallgrass Prairie Habitat Restoration**

Kathy Denning

Ph.D. Candidate, University of Kansas, Department of Ecology & Evolutionary Biology

What image pops into your mind when you read the phrase "prairie pollinator"? Most people's thoughts likely turn immediately to the honeybee, and with good reason. Honeybees are incredibly important economically and agriculturally, and in fact are the official state insect of Kansas. However, honeybees (*Apis mellifera*) are actually a non-native species, introduced to the U.S. by European settlers. The tallgrass prairie is home to a vast diversity of native insect pollinators, ranging from the familiar bumblebees,

**"pollinators worldwide are at serious risk of population decline and extinction"**

to tiny, iridescent green "sweat bees" and a wide variety of other insects, such as beetles, butterflies and flies.

These native pollinators have co-evolved with tallgrass prairie wildflowers for thousands of years and provide the pollination services that the majority of prairie forbs rely on. Unfortunately, pollinators worldwide are at serious risk of population decline and extinction. One of the primary threats to pollinators in the heavily human-modified tallgrass prairie has been habitat loss. Across the Midwest, agricultural conversion of the tall-

grass prairie has destroyed vast expanses of native habitat that pollinators rely on for foraging and nesting space and resources.

Over the past three summers, I have surveyed insect pollinator communities across remnant (native, never plowed) and reconstructed ("restored") prairies in northeast Kansas, with the intent of addressing the following question: "Can tallgrass prairie restoration reinstate native pollinator communities?". From 2013-2015, I recorded over 8000 interactions between 123 forb



**Figure 1:** Surveying insects at a prairie remnant with field assistant Anna Tatarko (right).

species and >250 insect species (Figure 1). Currently, I'm spending most of my time identifying insects and entering data, but I have conducted a few preliminary analyses, and a very interesting picture is starting to emerge.

**"If you build it, they will come...for the most part".** I modified this line from the well-known Kevin Costner movie *Field of Dreams*, and it sums up what I'm seeing so far, as I work to understand how insect pollinators respond to prairie restoration. My preliminary analyses indicate that pollinator abundance, diversity, and community composition do not significantly differ between remnant and reconstructed prairies. It's important to note that this doesn't mean that pollinator communities on remnants and reconstructions are the same, though. In fact, I found quite the opposite. There appears to be quite a bit of variation in the pollinator communities, both between sites and within years (Figure 2).

On one hand, I think we can take this as good news. I would have been very worried about the progress of prairie restoration had I seen that, uniformly, restorations had very low pollinator abundance and diversity. On the other hand, as so often happens in the sciences, this result raises more questions than it answers. Why do we see so much variation?

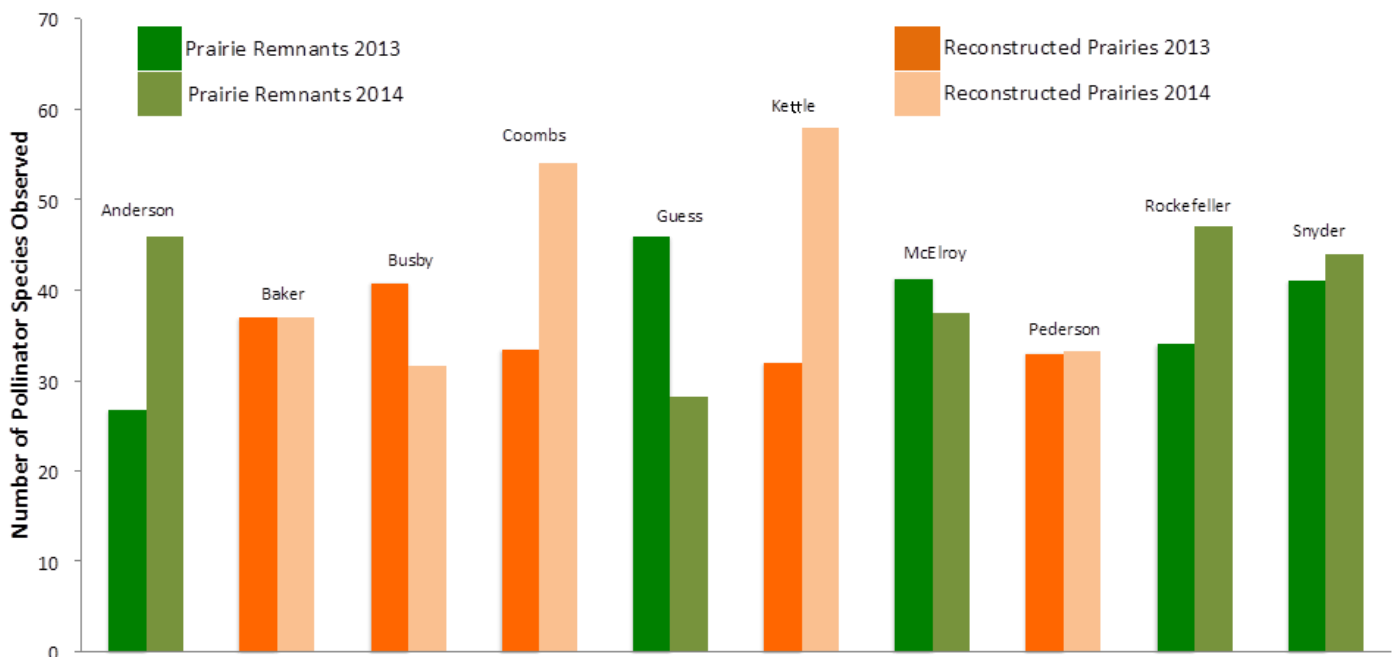
I have just begun to interpret my findings, but I'll share my preliminary ideas with you. Basically, I think that much of the variation in the pollinator data stems three factors: A) the mobile nature of pollinators, B) the complexities of the landscapes within which these prairies are situated, and C) the diverse life-history traits of the pollinators. Let's break this down a bit:

First, it is critical to understand that many of the pollinators I have been observing on these relatively small prairies are likely "just visiting" (Figure 3). That is to say, while some of them surely are nesting and foraging almost entirely on the study site itself, others are probably travelling throughout the landscape, searching for food resources and nesting sites across fairly

broad spatial scales. Therefore, they are likely being influenced not only by the wildflower community at each focal site, but also by the land use practices in the landscapes surrounding each site.

Second, when I began this project, I assumed that each of my prairies would be surrounded by a very homogeneous landscape of high-intensity agriculture. Surprisingly, I have found that the landscapes surrounding the study sites are highly variable! Some of these prairies are indeed surrounded primarily by corn and soybean fields, while others are embedded within a mix of farmland, Conservation Reserve Program (CRP) fields, pastures, and forested lands. In other words, a pollinator trying to "make a living" in the vicinity of Snyder prairie is likely facing a very different type and spatial arrangement of foraging and nesting resources than a pollinator of that same species living in the vicinity, say, of Rockefeller prairie.

Third, the situation becomes even more complicated when one considers that prairie pollinators have an incredibly diverse array of host plant requirements, foraging ranges (the distance they can travel from their nests), and phenologies (in this case, the period of time that they are active during the growing season). For example, bumblebees are active from spring to fall, can feed on nectar and pollen from a wide variety of wildflowers, and are able to travel up to several kilometers from their nest sites to find the food they need. These traits may allow them to thrive across a wide variety of prairie remnants and reconstructions and may even allow them to survive in landscapes that are more heavily farmed. In contrast, the cellophane bee, *Colletes robertsonii*, only visits legumes, so it would be highly unlikely that I would record it on a prairie with no currently-blooming legume species. Other species, such as the sweat-bee *Augochlora pura*, are generalist pollinators, yet require very specific nesting conditions. A given prairie may be able to support *Augochlora pura*'s foraging needs, but if it doesn't have rotting wood (its preferred nest material) some-



**Figure 2:** Pollinator richness (number of species) recorded at each site in 2013 and 2014.

Note the extent of variation in pollinator richness between sites in each year and within sites across different years.



where in the nearby landscape, the species will not be present.

So what to make of all of this complexity? At first glance, it seems almost impossible to make sense of these data. However, as a community ecologist, I'm used to dealing with the complex nature of these datasets. In fact, that's a large part of the fun! In the next several months, I will continue to untangle this complicated dataset. I am currently searching the literature and building a database of pollinator "functional traits" (e.g. host plants, nesting locations, active seasons), with the goal of assessing whether pollinators that have similar traits, regardless of whether they are bees, butterflies or beetles, are responding in the same way to prairie restoration.

I am also starting to look more closely at whether generalist pollinators that are widespread and abundant across both remnants and reconstructed prairies are utilizing the same plant species across all sites. As those of you involved in prairie restoration surely know, some prairie forbs seem to re-establish quite easily, while others tend to be very difficult to establish. How does this affect pollinator foraging patterns, and are there certain frequently-visited plant species we should be prioritizing in restorations? I look forward to continuing with this work, and I hope you will all stay tuned for future pollinator-related updates!

Kathy Denning

*Kathy Roccaforte Denning received grants from the Rachel Snyder Memorial Scholarship Fund in 2013 and 2014 to help with her research expenses.*



**Figure 3:** Regal fritillaries may visit non-native forbs such as nodding thistle (*Carduus nutans*) at low-diversity prairie sites. However, they will not be able to maintain viable populations unless their larval host plant (*Viola spp.*), is available somewhere in the surrounding landscape.

## Thank you to:

**To all those who helped with the Free State Prairie Walk** see article on page 8

**Andrea Repinsky, Megan Withiam, Frank Norman and Jason Keezer** for volunteering at the GHF table during the Mother Earth News Fair.

**The Lawrence Fruit Tree Project** for inviting us to co-sponsor their recent workshop, Intro.to Fire by Friction.

**Lawrence-Douglas County Fire Medical department** for allowing us to use the Jayhawk Conference Room in September

**Craig Freeman** for providing space for our board meetings

**Sharon Gan-Yang** for doing the layout for our newsletter

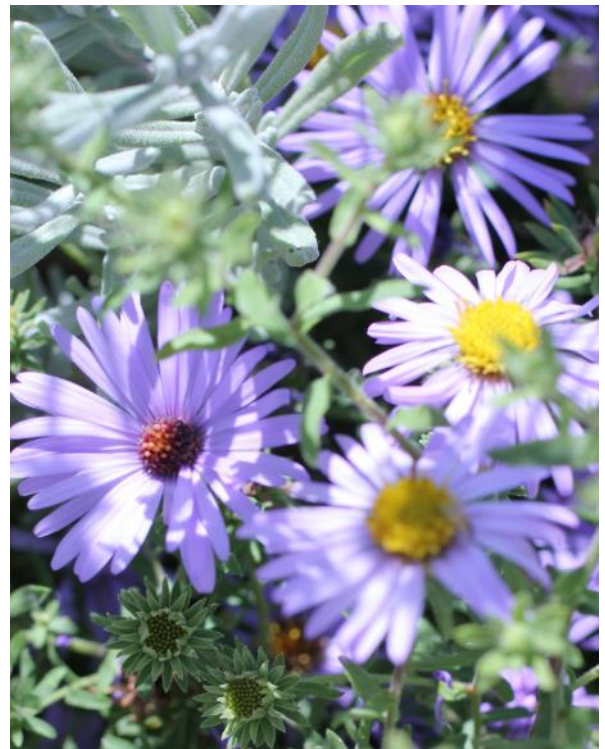
**Kevin Bachkora** for monthly accounting assistance

## Special Donations since the last news:

**New Members:** Steve & Helen Horton, Betty Sterling, Kelly Haller, James Zunda, and John Cougher

**For Prairie Management:** Jamie Holting

## Native Plantings Around Town



A late blooming native aster-still looking beautiful in late November at my house! Sue Holcomb

## We depend on your contributions!

Please help GHF complete its mission by sending your donation today. The date of your last contribution is printed above your name on the mailing label.

**Send 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 \_\_\_\_\_

\_\_\_ **I'd like to receive my newsletter in pdf form by email at the above address**

\_\_\_ Contact me about volunteering

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

Your contribution will be placed in the general fund unless you designate your donation for :

\_\_\_ Rachel Snyder Memorial Scholarship Fund

\_\_\_ Prairie Acquisition

\_\_\_ Education programs

\_\_\_ Prairie Management



## Free State Prairie Walk

In August, GHF co-hosted a presentation and tour of the Free State Prairie in Lawrence. The FS Prairie is a joint project of the University of Kansas Dept. of Ecology and Evolutionary Biology and Free State High School. The event kicked off with a presentation by FS Prairie project leaders Dr. Helen Alexander, KU, and Julie Schwarting, FSHS, (*below*) who talked about the history of the project and the research that is currently being conducted there. Their presentation was followed by a plant walk led by Frank Norman, GHF Snyder Preserve Manager and Courtney Master-son, Graduate Student in the Dept. of Ecology and Evolutionary Biology. We had a great day with over 120 people turning out for the event! We want to thank Dr. Alexander and Ms. Schwarting for working with us on the event and letting us help them show this fantastic project to the community. (Thanks to Kim Bellemere for all her work.)



Dr. Helen Alexander (KU) right  
and Julie Schwarting (FSHS)



Plant walk with Frank Norman

To receive your newsletter in pdf form by email, contact Sue Holcomb, [sholc2003@yahoo.com](mailto:sholc2003@yahoo.com) or 913-856-4784. Also, please let us know if you no longer wish to receive the GHF News. Thank you!