

Summer Edition September 2020

EVENTS

After missing our usual spring events, we're excited to see you during the late summer and fall! Safety measures such as masks, distancing, and low-contact will be used at all of these outdoor events.

Fall Native Plant Sale

Thursday, Sept. 10, 4-6:00 pm, at Cottin's Farmers Market behind Cottin's Hardware & Rental, 1832 Massachusetts St., Lawrence

Black Jack Battlefield Restoration Workdays

For all workdays, meet at Black Jack Battlefield near Baldwin City at 163 E 2000 Rd. RSVP and more information: www.grasslandheritage.org

Invasive Species Removal Dates

September 17, 5-7 pm October 10, 9 am-12 pm October 24, 9 am-12 pm

Seed Collection Date

October 17, 2-5 pm

IN THIS ISSUE

- P. 2 President's Letter
- P. 3 Farewell to Gary Tegtmeier
- P. 4 Collecting Seeds for Restoration
- P. 5 Black Jack Battlefield Restoration
- P. 6 Kathy Denning Joins GHF Board
- P. 6 Build Your Collection with iNaturalist
- P. 7 Donations and Thanks



It's a Match for Monarch Management!

Be part of our new "Managing for Monarchs" special project! Long-time GHF supporters Dennis and Susan Lordi Marker have pledged to match donations to GHF in 2020 up to \$10,000.

Project funds will be used to improve habitat for monarchs and other pollinators, to add milkweed species, restore nectar species which will bloom from early in the season through late fall, remove woody species that outcompete forbs in the prairie, re-



Dennis and Susan Lordi Marker

move cedars that create too much shade, and with enough funding, purchase an adjacent parcel to increase habitat and improve access.

Previous donations from the Markers have been used for scholarships, education programs, and management projects at Snyder Prairie. Thank you, Susan and Dennis, for your leadership, vision, and generosity.

GHF Fall Native Plant Sale

Fall is a great time to plant natives. Pick up yours at the Fall Native Plant Sale!

GHF is hosting a Fall Native Plant Sale on September 10th, 2020 at Cottin's Farmer's Market behind Cottin's Hardware at 1832 Mass St, in Lawrence, from 4 to 6 pm! All plants are locally grown Kansas natives and are neonic free.

We will have 10-15 species available to purchase and all plants will be \$4.00 each. We're not taking advance member orders during the fall sale. Please remember to wear a mask and shop safely!

Black Jack Battlefield Restoration Begins



This fall we begin a two year project in partnership with Native Lands LLC and Black Jack Battlefield and Nature Park to restore and revitalize prairie at Black Jack Battlefield.
Funded by the Douglas County Heritage and Conservation Council, this project will engage volunteers and the local community with a historically and ecologically important site in Douglas County.

Continued p. 5



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
Roxie McGee, Lawrence
Randy Rasa, Iola
Andrea Repinsky, Lawrence
Orley "Chip" Taylor, Berryton
Megan Withiam, Lawrence
Joyce Wolf, Lecompton
Ron Wolf, Lecompton

GHF Staff

Kaitlyn Ammerlaan, Program Director and Preserve Manager

A Note from the President

The recent scare about strange unordered seeds from China got me thinking about all the invasive species we have and where they came from. Many of the animal species came in by accident, often in ship ballast. But, many of the plants that we are now plagued with were introduced purposefully, with little thought to the long-term consequences.

Plants have been exchanged for thousands of years, at first for medicinal or agricultural purposes. Eventually, wealthy people influenced the movement of plants for their aesthetic properties. In North America, plants have been exchanged to and from Europe from the beginnings of our country. Thomas Jefferson, an avid horticulturist, introduced several species. He may have been the first person to introduce *Cytisus scoparius* (Scotch broom) as an ornamental, which is now an invasive species in many parts of North America.

Several species we now battle were introduced for erosion control. In the 1930's the Soil Conservation Service was tasked with combating the effects of poor agricultural practices. It promoted the use of several species, such as *Elaeagnus angustifolia* (Russian olive), *Rosa multiflora* (multiflora rose), *and Pueraria lobata* (kudzu). While originally ornamental, millions of cuttings were spread throughout the US and naturalization and invasion proceeded.

One of the plants we fight on all our properties is Sericea lespedeza *Lespedeza cuneate*. It was introduced from Japan in 1896 to North Carolina to be studied as an agricultural crop. It has been used as livestock forage, for soil improvement and erosion control. It was widely planted in the area of the old lead mines in Kansas and Missouri. Unfortunately, we now find that cattle won't eat it because of high tannin levels. It isn't negatively affected by many herbicides. It's a deep-rooted plant, flourishing under adverse conditions. It produces a bounty of seeds which survive for many years in the soil. Hay from infected fields gets moved around and sericea is introduced to new locations.

Teasel, which was introduced for floral arrangements, is currently being spread all along our motorways by mowing equipment and cutting after seed has set. Both teasel and sericea outcompete all native species and produce huge monocultures.

This brings us to: "Don't plant strange seeds from China!" We don't know that any of these are dangerous,



My new favorite native plant is Rock pink, *Phemeranthus calycinus*. Every afternoon the flowers open up and put on a glorious show. If you look at it early in the day there's no pink to be seen.

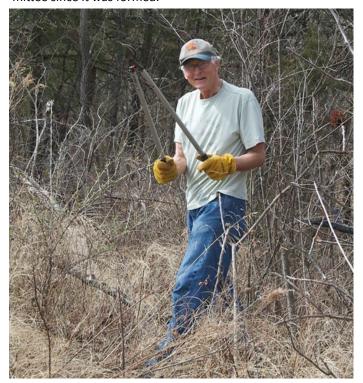
but we sure don't know they are safe. Spend time out in natural areas helping to eliminate foreign invaders. We can always use help on our properties and are starting our project with the Black Jack Battlefield this year. If we want to have our unique landscapes they need our help. Many of you have purchased native plants from us and planted them in your yards. This is a great start to reintroducing these plants. We don't need to fill our yards with exotic plants, particularly those that don't behave themselves.

Sue Holcomb

sholc2003@yahoo.com

Remembering Gary Tegtmeier

We're sad to share the news that long-time GHF supporter and board member Dr. Gary Tegtmeier passed away on July 4th after a long illness. Gary joined the GHF board in 1993 and served continuously through the years, even offering his advice when he couldn't attend meetings in recent months. He served as vice -president multiple times and as one of our four directors several years. He participated in the property management committee since it was formed.



Gary led the Groundhogs volunteer property maintenance group when GHF owned and operated the Prairie Center in Olathe. He continued to serve as a Groundhog for many years, participating in burns, sawing down trees, lopping woodies, and more.

Gary, and often Mary Kowalski, his partner, would volunteer at GHF events, tabling at the Shawnee Indian Mission and helping out with the native plant sale. He was a great help reading scholarship applications and selecting recipients.

After he acquired Paintbrush Prairie he encouraged GHF to save a nearby parcel that was up for sale. He was the driving force behind our purchase of Leadplant Prairie near Welda, Kansas in 2018. He and Mary were out there surveying plants and removing teasel even last year, and he generously allowed us to collect seeds on his property to help with restoration at Leadplant.

Gary was quick to invite others to share a meal or a beer at Free State Brewery or from the cooler he brought along. He was a friend to everyone. Gary supported GHF generously through the years. He encouraged friends to make donations instead of buying Christmas presents. He involved friends and coworkers, always trying to encourage more prairie lovers.

The family plans a memorial at a later date. Mike Campbell, Roger Dodd, Dr. Rudy L & Connie Edwards, Dean & Lisa Goodell,

Susan Hazlett, Edward Scott, Joyce & Ron Wolf, Sue & Steve Holcomb, and Edward & Kristine Votoupal have already contributed memorials to Gary and we welcome gifts to the Prairie Preservation Fund or the Land Management Fund in his name.



"I admired Gary for always being uplifting, a lover of life, and a true shepherd of the prairie. A good friend I will miss." - Steve Holcomb

"I admired him for his goodness and enthusiasm. His love for prairie burned bright." - Roxie McGee

"I'm so grateful to Gary for his kindness, strength, and love for the prairie. His work to protect Paintbrush Prairie and many other grasslands will help future generations know and experience the wonder of prairie. Thank you, Gary." — Courtney Masterson



"You couldn't find a person more passionate and driven to save native tallgrass prairies, and he rallied and inspired others to follow. And then, he'd get us all to go to Free State Brewery afterward. He will be missed." - Angie Babbit

"The loss of my dear, old friend (50+ years) causes me to reflect on the impact that Gary had on so many people...his enthusiasms were many and he never met anyone he couldn't strike up a conversation with and make feel welcome. He often credited me with introducing him to the "prairie family" and after many years finally cajoling him into coming onto the Board of GHF. His devotion to the cause of prairie preservation was second only to his devotion to family and friends. I feel I have been blessed by his friendship....he will be sorely missed."—Ann Simpson

"Gary loved life, friends, a good laugh, and the prairie with the same depth and passion. I will always admire and emulate his commitment to protecting the prairie." — Andrea Repinsky

Collecting Seeds for Restoration

By Jeff Hansen

It's been nearly twenty years since I wrote about seed collecting for the GHF newsletter. Since that time I've learned a lot by collecting seed for prairie seed banks. The most recent is the Dixon National Tallgrass Prairie Seed Bank, managed by the Chicago Botanical Garden. I've made 623 collections of seeds, vouchers, and DNA samples for that project. Its goal is to bank at least one sample of every species found in the tallgrass ecosystem. Furthermore collections of a select 500 species most important for restorations are collected from one population in each of the 12 ecoregions represented in the tallgrass prairie. This is not an easy task when you consider that 96 percent of the tallgrass prairie has been lost. Anyone can contribute to the project. The site www.sciencecollections.org explains the project.

When collecting seeds for a restoration it's important to know your site. Learn the habitat of the restoration site. What is the soil structure? Is it clay, loam, sand, gravel, rock? What about the drainage of the site? Is it a sloping site or is it relatively level? Are there any low spots where water collects? Maybe there is a seep that stays wet most of the year. The soil and drainage of the collection site should match the soil and drainage of the restoration site. Generally speaking a site will be composed of various soils and drainages.

Try to collect seed as close to the restoration as possible. The closer you are to the site the better adapted the plants will be to local growing conditions. My practice was to collect from the county of the restoration site or at least an adjacent county.

One of the most difficult parts of collecting seed is timing. If you are too early, the seed isn't ready to be collected. If you wait too long the plants may have already dispersed their seeds.

A rule of thumb that generally works for most species is to collect seed approximately 30 days after the plants flower. It's often easy to find a flowering plant but much more difficult to find that same plant post flowering. Know your species leaf and fruit structure. A milkweed pod looks nothing like the flower but the leaves do not change.

It's really useful to learn your plant families as plants in a specific family generally all disperse their seeds the same way. For example all grasses are in the Poaceae family tend to keep their seeds on the plant after they ripen. Milkweeds all produce pods that open up when mature and the seed is dispersed by the wind. Many members of the Rose family produce fruit that is dispersed by animals. They should be collected before animals consume them. Probably the most difficult species to collect are the low growing ones. When their fruit is mature they are nearly impossible to find. And there are a few species whose seed pods explode when they are ripe. Violets are one of those species so you must collect them when the seed is mature but hasn't been dispersed. Collecting seeds is very challenging.

It's important when collecting seeds to not over collect. In general, do not collect more than 20 percent of the seed from a

population. This is especially true of annuals as the next generation is dependent on the seeds produced in the current season. Only collect the seed that you need. Do not collect species that won't survive on your restoration. For example, if it is an upland site, collecting wetland species would be useless as the growing needs would not be met by an upland site.







Examples of plants in August too early for seed collection:

Prairie blazing star, *Liatris* pycnostachya (top left);

Common milkweed, Asclepias syriaca (top right);

Butterfly milkweed, Asclepias tuberosa (left)

Using paper bags to collect into is important as plastic does not allow the seeds to dry and they may become moldy or rot. That said, I do use plastic as a temporary container while collecting. Plastic pails can be useful as they are rigid and seed can fall into them when you are collecting. I generally wear leather gloves as some plants are quite sharp. Pruning shears are nice for cutting the seed structures from plants like Echinacea.

I recommend the book called "Restoring the Tallgrass Prairie" by Shirley Shirley. It has been my collecting guide for decades. It focuses on Iowa plants but most are also found in Kansas. Use it to learn to recognize and collect various tallgrass prairie plants.

Seeds can be collected from spring through early winter and fall is when the majority are ready. And I can't think of a better time to be on the prairie than on a crisp autumn day. I hope you get to experience seed collecting as it is a great hands-on method of creating new habitat for prairie plants and the animals that depend on them.

Editor's note: Please be safe, watch for steers, and get permission from landowners and public land managers for access and seed collection.

New Project: Black Jack Battlefield Restoration

continued from p.1 Through this project, we hope to restore and protect the native tallgrass prairie ecosystem of Black Jack Battlefield. Historically, trees and woods would have been limited to the creek and river beds, and native prairie would have existed essentially everywhere in between. As recently as 1991, most of the trees, besides those planted in the northeastern part of the property, were limited to the creek. Tackling the invasion of woody species is one of the main goals of this project. Overall, we hope to 1) connect remnant prairie parcels by removing woody islands, 2) control an invading black locust tree population on the southeastern field, 3) restore and diversify the southeastern field back to native tallgrass prairie using locally harvested seed and native forb and grass plugs, and 4) restore fire management to the site.

Black Jack Battefield and Nature Park
1991

Creek

Google Earth



When approaching a prairie restoration project, the history of the site is always an important consideration. Ecologically, we look for signs of disturbance and other ecological indicators to help guide us in the restoration and long-term management plans. What makes Black Jack Battlefield interesting is that there is an added layer of history for us to consider when we approach this project. This park invites visitors into nature to learn about a few key moments in the history of our community. Black Jack

Battlefield and Nature Park marks the site of The Battle of Black Jack, one of the many clashes in our nation's history between proslavery and antislavery groups.

The Battle of Black Jack is said to be first armed battle between proslavery and antislavery militia in the United States. Following the passage of the Kansas-Nebraska Act, which allowed Kansans to vote on whether they wanted to allow slavery in the territory, tensions



August seed collection, Boyd Prairie

between proslavery and antislavery groups grew. This period of unrest in the region, known as Bleeding Kansas, set the stage for the start of the Civil War.

Following Sheriff Samuel Jones' proslavery raid on Lawrence in May of 1856, abolitionist John Brown and other anti-slavery men murdered five proslavery men in retaliation, known as the Pottawatomie Massacre. In this escalation of violence, proslavery militia leader Henry Pate captured two of John Brown's sons.

On June 2, 1856 while Henry Pate and his militia were camped along the Santa Fe Trail, Brown's free-state militia strategically attacked Pate's group. The intense battle involved about 100 men and lasted about three hours, ending with the surrender of Henry Pate and the release of Brown's sons.

The Battle of Black Jack further solidified the divide between proslavery and free-state factions in Kansas. And, as people across the nation read about the events unfolding in the Kansas territory, the escalation of a nationwide conflict became increasingly imminent.

Black Jack Battlefield remains an important place that signifies the pursuit of Kansas as a free state and the shaping of the community in which we live today. We are excited to restore the land and help protect our community's cultural heritage.

You're welcome to join us on this project and visit this interesting site during the five workdays scheduled for this fall:

Seed Collection

Saturday August 22nd 5-7pm Saturday October 17th, 2-5pm

Invasive Species Removal

Thursday September 17th 5-7pm Saturday October 10th 9am-12pm Saturday October 24th 9am-12pm

This project has been funded by a grant from the Douglas County Heritage Conservation Council. This content is solely the responsibility of the authors and does not officially represent the views of the Douglas County Heritage Conservation Council.

Kathy Denning Joins the GHF Board

Hello, fellow prairie enthusiasts! My name is Kathy (Roccaforte) Denning, and I am very pleased to have been nominated as a GHF board member. When I moved to Lawrence eight years ago to attend KU, I was surprised and delighted by the many remnant prairie hayfields scattered throughout the region (a true rarity in eastern Nebraska, where I am from). I first caught the "prairie bug" on a trip to the Sandhills of western Nebraska when I was in college. Something about those rolling waves of grass brought out my inner Willa Cather. After graduating from Creighton University, I worked in the plant conservation lab at Omaha's Henry Doorly Zoo, where I had a chance to return to the Sandhills to help track populations of the western prairie fringed orchid. I completed my MS in biology at the University of Nebraska and moved to Lawrence in 2012 to work on my PhD in Bryan Foster's lab at the University of Kansas. I have been fortunate to have met many GHF members through my work on the effects of tallgrass prairie reconstruction on native pollinators, and I greatly benefited from the financial support of the GHF's Rachel Snyder Memorial Scholarship.

I recently defended my dissertation and am now working in KU's Office for Diversity in Science Training, coordinating a program

that provides research opportunities to recent college graduates who plan to apply to STEM PhD programs and who are members of underrepresented groups. In my free time, my husband and I have enjoyed building our "micro-prairie" in our backyard in suburban Lenexa and watching it become a haven for our native bees, butterflies and beetles.



Collect, Identify, and Learn with iNaturalist

We love to share the prairie with everyone, in part to cultivate a using iNat to encourage people to engage with nature. Eleanor community that will value and protect it. iNaturalist (iNat) is an effective way for people to connect with nature. iNat is a free website and app that invites users to save photos of observed species in a globally shared database. It also helps with identification, both through suggestions made by the tool and through identification suggested by users— some very knowledgeable.



Observations at GHF's Leadplant Prairie on the iNaturalist website

Randy Rasa, GHF board member, uses iNat quite often. He said, "It's very useful for identifying unknown species. It's not 100% accurate but it usually gets you pretty close. I also use it for logging what I see and where I see it. It's a great way to keep track of when different species begin blooming, for instance. In addition, the web site offers more detailed info about individual observations, including a worldwide map (so you can see where else people observed a species), as well as links for more scientific data, and suggestions for similar species."

The University of Kansas Natural History Museum (KUNHM) is

Gardner, Outreach and Engagement Coordinator of KUNHM, said that iNat is a fun activity for families to do together, and it's a new way for the museum to interact with the public, as museum curators use iNat participant photos for educational outreach. Gardner has made projects in iNat which challenge users to find specific observations such as nests and other structures.

Thomas Koffel of Lawrence appreciates that iNat helps him organize his own collection, while making it available for research and other people to benefit, plus connect with new people. He can use iNat to search his own photos and others by species, family, date, location, and more. Koffel is a theoretical ecologist and postdoctoral associate who has made an impressive 23,650 observations and 51,943 identifications of 5,260 species to date—the second most prolific iNat user in Kansas. Koffel explores outdoors extensively as a hobby, and he said that iNat has helped him bring real-world knowledge to his academic research. He likes to feel that his exploration is part of a community, not just for his own enjoyment. Koffel said that after an outing, he'll review and crop his photos, use the Bug Guide website and other resources to aid identification, and upload photos in batches to the iNat website.

Rasa added GHF's Leadplant and Snyder Prairies, plus Lehigh Portland Trails, as searchable places in iNat. You can add to the observation lists for these sites when you visit. Rasa advised that there is also a sister app called "Seek." "It allows you to quickly ID things. It's not quite as accurate or comprehensive as the full-blown iNat, but can be really handy in the field or for more casual users."

We depend on your last contribute online or send the	ution is printed ab	ove your name or	the mailing label			
embership Categories:\$20 Friend\$500 Patron		\$35 Family\$50 Steward \$1000 Benefactor\$5000 Fou				
Name						
Address						
City		St	ateZi	p		
Phone Email						
Save postage, printingContact me about voGift in honor or mem	lunteering			nted newsletter to the		
Your contribution will suppo	rt prairie conserva	tion in the genera	l fund unless you			
designate your donation for				Membership renewals and		
Scholarship Fund NE		EW in 2020: Match my donation		donations	donations can also be sent	
Prairie Protection fo		or Monarch Mana	gement!	to GF	to GHF online at	
Education Programs				www.grasslandheritage.org		
Prairie Managem	ent					

Donations and Appreciation

New Members/Donors

Lucie Black, Frances Cain, Lori Callow, Corey Entriken, Margaret Fast, Christopher Ford, Terri Herman, Debbie Johns, Carolyn Kusmin, Jimmy Ponchillia, Rod Shriwise, Susan Stahl, Jason Tipton, Carole Tomlinson, Pennie von Achen, Terri Wendlandt, Marianne Wille, James Young, Dana Chance, Roger Dodd, Dr Rudy L & Connie Edwards, Kathryn Gates, Edward Scott, Edward & Kristine Votoupal

Prairie Protection Fund: Jan Butin, Roger Dodd, Ruth Stepien, Edward & Kristine Votoupal, Dr. Rudy L & Connie Edwards, Dean & Lisa Goodell, Andrea Repinsky

Prairie Education Fund: Lori Callow

Scholarship Fund: Mary Cottom, Ozark Wilderness Waterways

Land Management Fund: Frances Cain, Edward Scott

Memoria and Honorifics

In Memory of Dr. Gary Tegtmeier: Mike Campbell, Roger Dodd, Dr. Rudy L & Connie Edwards, Dean & Lisa Goodell, Susan Hazlett, Edward Scott, Edward & Kristine Votoupal, Sue & Steve Holcomb, Ron & Joyce Wolf

Marianne Wille In honor of Barbara Clark Byril Sanders In honor of Joseph O. Berger Kathryn Gates In honor of Matt Garrett Susan Stahl In honor of Roxie McGee Kathryn Lange In honor of Steve and Sue Holcomb

Kevin Bachkora for accounting services

'Thank you' to:

Steve and Sue Holcomb, Mike Campbell, Kaitlyn Ammerlaan, and Randy Rasa for removing teasel at Leadplant Prairie in June Mike Campbell for spraying invasives through the summer Cottin's Hardware for hosting GHF's Sept. 10 fall plant sale

Sue Holcomb, Steve Holcomb, Roxie McGee, Margaret Rose, and Stacy Stewart for tagging, organizing, and sorting our spring plant sale orders. Thank you to Margaret Rose for helping with plant deliveries around Lawrence. Thanks to Sue Holcomb, Steve Holcomb, Jesse Belt, Ken Tillery, Roxie McGee, Andrea Repinsky, and Courtney Masterson for helping distribute plants.

Andrea Repinsky, Jason Keezer, Kaitlyn Ammerlaan and Susan Lawson for Oak Hill Cemetery garden maintenance.

Attention teachers!

GHF is developing virtual prairie education for students during the upcoming school year. We plan to share the Free State Prairie with students though a virtual prairie "field trip" that explores biodiversity, prairie plants, land management and more! If you are interested in participating with your class, contact Kaitlyn at grasslandheritage@gmail.com for more information.

Grassland Heritage Foundation PO Box 394 Shawnee Mission, KS 66201

Return Service Requested

Non-Profit Organization

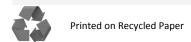
US POSTAGE PAID

Olathe, KS

Permit No 309

Your last contribution was made:

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



Fall Native Plant Sale

Thursday, September 10th, 2020 4:00 - 6:00 PM At the Cottin's Farmers Market Behind Cottin's Hardware & Rental 1832 Massachusetts St., Lawrence

Fall is a great time to plant natives. Pick up yours at the Fall GHF Native Plant Sale. All plants are locally grown Kansas natives and are neonic free.

The cost for all plants is \$4.00. We can not take advance member orders during the fall sale.

Please wear a mask and shop safely!

Contact us at grasslandheritage@gmail.com for more information.

