Sandsage Prairie in Kansas

ANTHONY ZUKOFF

Anyone who has traveled beyond Great Bend will agree that the western Kansas landscape is quite different from that of the eastern portion of the state, and to the uninformed eye, it might look like one continuous expanse of dry, shortgrass prairie. However, quite a few unique natural plant communities occur out west. One in particular, sandsage prairie, will be the focus of one of our outings during the upcoming June board meeting in Garden City.

Sandsage prairie is a unique natural community located primarily in the south-central High Plains between the Nebraska sandhills region and central Texas with a majority occurring in eastern Colorado and western Kansas. This particular prairie community is found on well-drained, deep, sandy soils associated with the wind-blown sediments of ancient floodplains. In western Kansas, this includes the dune belts south of the Arkansas River from approximately Garden City and west into Colorado. The sandy soils south of the Cimarron River in southwestern Kansas are another primary location for this natural community in the state. Historically, an estimated 1.3 million acres of sandsage prairie once covered Kansas, with over 500,000 acres occurring along the Arkansas River of Kearny, Finney, and Gray counties. With advances in irrigation technology and general development in the region, very little acreage exists today as undisturbed sandsage prairie. Fortunately, despite significant loss of this native community in the region, remnant sandsage prairie still exists in several places in southwest Kansas. In Finney County, over 8,000 acres of remnant sandsage prairie is currently preserved. A portion of that acreage is owned by a power company south of Holcomb while almost 4,000 acres is protected south of

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Garden City in an area known as the “Sandsage Bison Range and Wildlife Area” which is owned by the state of Kansas and open to the public. As with many of the unique plant communities found in Kansas, sandsage prairie is defined by the presence of a handful of dominant species. Namely, Sandsage (Artemisia filifolia) and a couple of grass species including Blue Grama (Bouteloua gracilis) and Sand Dropseed (Sporobolus cryptandrus).

While a cursory glance out at the prairie might lead one to believe it is a mostly barren place lacking in diversity, the sandsage prairie is surprisingly diverse given the harsh growing conditions of the region. Almost 200 plant species, most of them forbs, are documented from sandsage prairie. No small feat for an area with an historic average annual precipitation of less than 20 inches with a majority of that precipitation being lost to evaporation due to high summer temperatures, high winds, and low relative humidity.

The spring of 2015 was a spectacular year out on the sandsage prairie with a floral fireworks show I had yet to experience in western Kansas. The 2016 spring forecast for precipitation is looking promising; June will be an excellent opportunity for members to experience a unique plant community that one can only see in the southwest portion of the state.
Be Nice to Milkweeds!

Last week, Dee was listening to a farm program on KFRM radio while feeding cows. After he commented on it, I listened to the discussion via the internet. Toward the end of the radio dialogue the subject of monarch butterflies came up. The gist of the conversation was that “all modern agriculture kills insects” because of the chemicals used to kill harmful insects and weeds. The commentators did not disagree with that point, but they did go on to a discussion of the current campaign to “Save the Monarch Butterfly.” They questioned the need for the monarch, saying, “They do not do a thing and people should be more concerned about honey bees that actually do something.” They did concede that “monarchs are pretty, they are one of the only butterflies most people can name, they do go to Mexico and come back, and they are a lightning rod for the environmental movement that says all agriculture kills insects!” They went on to say, “It appears milkweeds are a big thing to butterflies.” The radio show discussion concluded with a missive, “Be nice to milkweeds.”

Dee and I then began to talk about the migration of the butterflies and to question between ourselves why they go to Mexico to lay eggs, as we have observed that they also lay eggs here. Then we remembered that we had learned the entire life cycle for a monarch is only six to eight weeks! As we searched for an answer we discovered that the ones that lay eggs in Mexico are not the same ones that lay eggs here! The ones who arrive here in the spring are four or five generations from the ones who leave here in the fall. (How did we miss that when we were learning about the life cycles?) In addition, the generation that overwinters in Mexico can live up to eight or nine months! Therefore, since the monarchs lay their eggs on milkweed and the larva only eat milkweed plants (Asclepias) and there are several generations each year of the larval stage that need the milkweed, it is essential that milkweeds are readily available from the time the monarchs arrive from Mexico in the spring until they return in the fall.

Now back to the radio discussion and the comment, “They do not do a thing.” The commentators apparently did not consider the important role of pollinators that monarchs play while the adults are feeding on the nectar of many types of wildflowers. The flowers monarchs choose are varieties that are brightly colored, grow in clusters, stay open during the day, and have flat surfaces that serve as landing pads for their tiny guests.

They did bring up the facts that monarchs have been selected as “a lightning rod for the environmental movement,” and “it appears milkweeds are a big thing to butterflies.” This might lead one to think that milkweeds are only important to monarch butterflies, which is a false assumption. Donald Lewis, an extension entomologist from Iowa State University, claims the monarch butterfly is one of 457 kinds of insects that feed on the common milkweed, though the common observer will never see that many.

To conclude my thoughts, I think it is important that when a discussion concerning the Save the Monarch campaign comes up that we help define why it is important to save this particular butterfly. It is much the same as when we campaigned to name Little Bluestem as the Kansas State Grass. It wasn’t chosen because it was the “best” grass, or the “prettiest” grass, or the “most recognized” grass. It was selected because it grew in all the counties in Kansas to represent ALL the grasses. And in this way, the monarch is important because it represents ALL the pollinators and the milkweeds are important because of the many kinds of insects (pollinators) that feed on them. It is spring, and once again time to get outside and tend to those gardens!

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**Tech Notes**

If you are wondering where to start on native landscaping, insects, prairie restoration, or invasive plants, check out the KNPS Resources page. Visit our website [http://www.ksnps.org](http://www.ksnps.org) and click on Resources in the left-hand column.

— MICKEY DELFELDER
For wildflower enthusiasts who simply cannot wait until September, 2016 for the Kansas Native Plant Society (KNPS) Annual Meeting to see old friends and make new acquaintances, here is a perfect solution. On June 18-19, 2016, KNPS is helping to celebrate the 100th Anniversary of the National Park Service at Tallgrass Prairie National Preserve in Chase County.

Tallgrass Prairie National Preserve is 11,000 acres of open, rolling prairie with creeks and springs and bison. There are over 40 miles of trails to take you to many fantastic panoramas, a clear and bubbling stream, several rocky draws, and a riparian forest. With a plant species list of nearly 600, you will keep busy... June is a peak time for wildflowers!

This special anniversary event is called “Prairie Pollinators: Wildflowers and Butterflies.” So why “pollinators?” Pollination is the transfer of pollen from the anther to the stigma of the flower to produce fruit and seeds. One way pollination is accomplished is by insects, creating an interdependent plant/insect relationship that is the focus of the pollinator weekend. The weekend’s activities are in conjunction with the annual Marvin Schwilling Butterfly Count on Saturday, June 18th. Participants divide into small groups, each with an experienced leader, and carpool to different count locations within a fifteen mile radius of the Preserve Headquarters. If you are interested in joining all or part of that count, Paula Matile will be coordinating the event.

Please contact her at pmatile@tnc.org for complete information.

Kansas Native Plant Society is co-hosting the June 18-19 activities. Our own knowledgeable and talented KNPS volunteers will be doing a variety of interesting presentations, demonstrations, and, of course, the ever-popular guided wildflower walks. Just a sample of the program includes wildflower painting, dyeing with plants, native wildflowers to attract butterflies to your garden, and medicinal plants. Look for the full schedule with presenters and updates as a link under Prairie Pollinators in the KNPS Events Calendar in April/May/June.
This year, especially for kids, we have prairie bingo, wildflower coloring sheets, and a “Plant Detective” activity. This is an awesome family event to take Dad out for Father’s Day. Contact one of the committee members below if you have questions, or if you want to volunteer.

All events take place from 9 am to 4 pm on both days. It is free and open to the public. Displays and presentations are held inside the historic barn, and the event will be held rain or shine. Come join the “Centennial party” in the middle of the Kansas Flint Hills surrounded by a vast sea of grasses and a multitude of colorful wildflowers.

See you there!

— Nancy Goulden, Susan Reimer, Iralee Barnard

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**Kansas Nongame Wildlife Advisory Council**

— RONDI ANDERSON

First of all, thank you! I have often thought I would like to have a say in how our state manages its resources, and WOW, the Kansas Nongame Wildlife Advisory Council (KNWAC) did that exactly. My first meeting was March 1st in Topeka at the Capitol and, surprise; I got to be the voting member!

The meeting opened with everyone introducing themselves, and then the secretary, Robin Jennison (Dept. of Wildlife, Parks, and Tourism), shared the current events going on in Topeka regarding conservation, and legislatively how and why these could play out in different ways. This included plenty of question and answer time that helped everyone to get a good understanding of the circumstances. One very informative discussion was about keeping animals off the Endangered List. A key component of this involves having a recovery plan which is costly, but my understanding of the discussion is that this is cheaper than not having a plan and then the federal government gets involved. This discussion ended indicating that working cooperatively with adjoining states had been beneficial previously, especially towards getting the job done and finding federal funding. Another interesting topic discussed was the increasing loss of environment and biology staff to what is being called Brain Drain. Basically, nationwide, there is a growing demand for these skills, and with the current economy, our state is losing top-notch employees to other states and businesses.

There were three presentations given starting with brief reports each on Chickadee Check-off and Monarch Monitoring (meeting March 24th in Manhattan). Lastly, Megan Rohweder gave an excellent presentation on SWAP (State Wildlife Action Plan) explaining a comprehensive vision for managing Kansas’ fish, wildlife, and their habitat. One note: I found it very interesting that eastern prairies are rather under-researched.

Finally, each organization represented had a chance to briefly share what was going on in their area. I reported that we are presently preparing a Kansas Native Pollinator Plant List and also something about ditches and weeds and dealing with all those that spray them.

Nothing beats doing something new. It is an adventure, and if you are new to KNPS, I highly recommend diving in and going for a ride. Sitting between Elaine (Sierra Club) and Megan (SWAP), I quickly learned there is no such thing as a dumb question. “So, who deals with native plants?” The Department of Agriculture! Life sure is interesting in Kansas!
The Kansas Native Plant Society is dedicated to promoting knowledge and appreciation of the native plants of Kansas — those species considered indigenous to the state. Unfortunately, non-native species occupy an increasing amount of our attention and energy. These are plants, originally from beyond the state’s borders, which have become established here outside of cultivation due to intentional or unintentional human activities.

As a botanist, I receive hundreds of questions every year from people needing information about non-native and invasive plants, including which ones are non-native, where they occur, when and why they were introduced, and which ones threaten our environment, economy, and human health. To answer many of those questions, I rely heavily on plant specimens collected in Kansas and deposited in the state’s herbaria since 1860. Legacy data associated with the estimated 250,000 specimens collected in Kansas give us unique insights into changes in the flora during the past 160 years.

An estimated 50,000 plant and animal species have been introduced into the United States. Many are vital to the U.S. and Kansas economies (plant examples include wheat, corn, milo, and soybeans), and most plant species grown for agricultural or horticultural purposes rarely, if ever, escape from cultivation. They lack the capacity to reproduce and sustain viable populations without human assistance. However, about 4,000 species of non-native flowering plants, conifers, and ferns do grow outside of cultivation in the U.S. Some are among the leading threats to our state’s biodiversity and economy.

In Kansas, 23% of the nearly 2,200 plant species documented outside of cultivation likely were not here when Euro-Americans arrived. Since 1860, 3.4 new, non-native species have been documented per year; although some species have become established outside of cultivation only briefly before disappearing. Even accounting for this turnover, the introduction rate is 2.3 species per year. More than a third of our non-native species were first documented from 1860–1900, a period during which the Kansas population grew from 0.11 to 1.47 million inhabitants and about 60% of the area of the state was converted from prairies, forests, and wetlands to crop fields, pastures, towns, and roads. Many of our noxious and agriculturally important weeds became established during the state’s early history. Following a 20-year period when comparatively few new non-native species were documented, the rate of discovery rose again beginning around 1920. It shows no sign of leveling off, even today. That trend stands in contrast to native species, half of which were documented by 1891. Continuing floristic work in Kansas during the past four decades has resulted in the discovery of 112 native species previously unknown in the state compared to 134 non-native species during the same period of time, a dramatic difference when one considers that there are four times more native species than non-native species in the state.

The number of non-native species per unit area in Kansas roughly mirrors that of our native species, being highest in eastern Kansas, especially east of the Flint Hills, and decreasing gradually as one travels west. More than 200 non-native species have been found in some eastern Kansas counties; eight of our western counties have fewer than 40 non-native species. The percentage of non-native species compared to all species documented in each county reveals that counties in the northern half of Kansas generally have slightly higher percentages (2–9%) of non-native species compared to counties in the southern half of Kansas. This pattern is mostly consistent with regional trends, although some collection bias is suspected in the data. For example, two of the seven counties with the highest percentage of non-native species are Douglas and Riley counties, where the state’s two largest herbaria are located and where botanists are concentrated. There also is evidence that collection efforts in Kansas, or at least attention to non-native species, has been greater here as compared to that in some surrounding states.

Non-native species can be divided into three broad groups based on why they were introduced: food and fiber plants for humans or
livestock; ornamental and landscape plants; and plants that arrived accidentally. Accidental introductions make up the largest percentage of our non-natives — about 59%. Ornaments and landscape plants (29%) and food and fiber plants (12%) are less numerous. However, as a group, only ornamentals show an increasing trend in number of new species per year since the 1860s; species used for food/fiber, or introduced unintentionally, show downward trends. These numbers confirm what many of us already suspect — that our gardens, lawns, and landscapes are reservoirs for many of the new non-native species becoming established across the state.

The invasiveness of a non-native plant species can be gauged by the geographic, reproductive, dispersal, and environmental establishment barriers it has overcome. Using simple assessment criteria, 66% of non-native Kansas species currently appear to be environmentally benign, at least for now, but the remaining portion warrants careful scrutiny. Our 27 most serious invaders have overcome all of the establishment barriers and can spread into semi-natural and natural habitats where they threaten the ecological integrity of native plant communities. These species affect ecosystems in a variety of ways, usually by outcompeting native species for resources, such as water (tamarix, Russian-olive) or light (kudzu, Amur honeysuckle, sericea lespedeza), or by affecting fire frequency and intensity (cheat).

Herbarium records and experience make it clear that non-native species are with us to stay. To prevent further damage to our native biodiversity, ecosystems, and economy, we will have to control non-native species by preventing new introductions, by detecting and eradicating new infestations of the most aggressive ones, and by managing those already established here. We can all help in this process by being more deliberate in our selection of plants for our landscapes, by using appropriate native species where we can, and by being better stewards of the landscapes that we manage.

Based on an article by the author that appeared in the July, 2014 newsletter of the Grassland Heritage Foundation.

**2016 ANNUAL WILDFLOWER WEEKEND | FORT SCOTT, KANSAS**

Mark your calendars! September 16-18 is the 2016 KNPS Annual Wildflower Weekend (AWW), our exciting and informative botanizing get-together. Come for one day or all three!

Your AWW Committee is in middle of planning events and activities, and this year Fort Scott is pleased to play host; a place in the “Middle of Everywhere.” This region is diverse with its woods, water, and plains, and is packed with loads of history and fun things to do from hunting, fishing, and antiquing, to Frisbee golf, biking, and off-road mudding at ROCKZ. We hope you come ready to explore!

May we suggest that now is a great time to plan nature photo shoots for photos to submit to our annual photography contest. The Wildflower of the Year, Golden Alexander, has its own category among the many others.

Maybe you could bring some items or goodies for the annual silent auction. This is a great way to participate in fund raising for KNPS activities by donating books, arts and crafts, jams, baked goods, articles of clothing, seeds, and much, much more.

Betsy Betros, author of “A Photographic Field Guide to the Butterflies in the Kansas City Region,” has agreed to be our speaker for Saturday morning’s annual meeting and we are super excited to hear her program. Betsy’s book is a gem for anyone interested in identifying these flying beauties and their preferred host plants.

Certainly, our favorite part of the weekend is YOU! Getting to meet all of you amazing people with common interests botanizing together in blazing fall Kansas prairie locations is such a neat, rejuvenating experience. Mark your calendars, and see you in September!
Information provided by Kansas Native Plant Society, see more events on our website: www.kansasnativeplantsociety.org

Please share this information and contact us about additional events to note. Thank you! <email@KSNPS.org>

Sturdy shoes, long pants, a hat, insect repellent, sunscreen, and water are recommended for outdoor events.

Mark your calendar now and plan to attend some fabulous happenings!

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**Spring Wildflowers at the Olathe Prairie Center in Johnson County, KS.** Experience the delicate ephemeral spring flowers at the Olathe Prairie Center with Sue Holcomb and Edna Hamerea, 10-11:30 am. Location of The Prairie Center: 26235 W. 135th St. Olathe, KS. We will meet in the parking lot on 135th west of Cedar Niles Rd (before you reach Moonlight Rd. if coming from the east). Sponsor: Kansas Native Plant Society. Contact: Edna Hamerea ednahamera@gmail.com

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**Silent Spring 2016: Threats to Birds, Bees and Other Wildlife.** The 1st Annual Audubon of Kansas Conference will focus on threats to birds, bees, and other wildlife, and how people can make a difference in their yards and gardens, and on their farms. There will also be a Legislative Panel Discussion to keep everyone up to date with the news from Topeka. Location: Lawrence Holiday Inn on McDonald Drive in Lawrence. Sponsor: Audubon of Kansas. Find out more: Joyce Wolf rjwolf@sunflower.com (785) 766-0697

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**Invasive Plant Removal in Oak Park, Wichita, KS.** Help rid the park of invasive Asian bush honeysuckle, starting at 9 am. We will work in conjunction with the Wichita Parks Department to make this great bird habitat even better. Sponsor: Wichita Audubon Society. Find more info: www.wichitaaudubon.org Coordinator: Pete Janzen pete.janzen@sbc.global.net (316) 519-1970

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**Spring Wildflower Walk at Hillsdale State Park in Miami County, KS.** Ken O’Dell will lead an exploration of the 1.5 mile “Hidden Spring Nature Trail” (Yes, there is a hidden spring!). While the terrain is steep in places, it is well graded with steps for easy walking. We will meet at the Visitor Center parking lot at 1 pm. Directions: The Visitor Center is at 26001 W. 255th St. in Paola. Turn west on the Hillsdale exit from k-7/169. Sponsor: Kansas Native Plant Society. Contact: Lenora Larson lenora.longlips@gmail.com

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**Grassland Heritage Foundation Groundhogs.** Volunteer prairie maintenance and preservation projects, third Saturday of each month except Dec. www.grasslandheritage.org Wear appropriate clothing. No special skills or tools needed. For details, please contact Frank Norman fjnorman@sunflower.com (785) 691-9748 (cell).

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**Go Native!** Are you tired of constantly watering and weeding your landscape plants? If so, try replacing these with native flowers and grasses. Native plants can tolerate our tough Midwest weather much better than non-native varieties. Join us for a day of learning about the wide variety of native plants that can suit your landscaping needs, 10 am to 2:20 pm. Missouri Prairie Foundation Spring Plant Sale at the Anita B. Gorman Discovery Center in Kansas City, MO. Missouri Prairie Foundation will be on site offering a native plant sale and partnering with Missouri Wildflowers Nursery, wide variety of native flowers, grasses, shrubs and trees will be available to purchase. Sponsor: Missouri Prairie Foundation, www.moprairie.org Questions? Contact: Doris Sherrick djsher@fairpoint.net (816) 716-9159

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**Wildflower Tour of Private Farms South of Concordia, Cloud County, KS.** This is a great opportunity to explore privately owned, preserved native areas in north central Kansas. Follow a KNPS guide and tour the property to discover wildflowers, native grasses, sedges, trees, shrubs, and more. The rare Fremont’s clematis can be found in abundance on one of the properties as well as green milkweed, spider milkweed, golden prairie clover, old plainsman and black sumpson Echinacea, to name a few. It is suggested to bring a camera, snack, and other gear as recommended above for outdoor events — if you choose. Meet in the SE corner of the Concordia Walmart Parking Lot (140 College Drive) at 1 pm. for introductions and caravan to the tour sites. Sponsor: Kansas Native Plant Society. Contact: Nadine Champlin nadinechamplin@yahoo.com (785) 285-0054

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**Missouri Prairie Foundation Spring Plant Sales at the City Market, KCMO.** The Missouri Prairie Foundation will hold its Annual Native Plant Sales, 8am to 1pm, at the City Market, 5th & Walnut, Kansas City, MO. A variety of native plants will be available. This is a great opportunity to buy native plants to provide habitat for native pollinators and birds. A generous portion of proceeds is donated by vendors to benefit MPF’s prairie conservation work. Sponsor: Missouri Prairie Foundation, www.moprairie.org Questions? Contact: Doris Sherrick djsher@fairpoint.net (816) 716-9159

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**2nd Sunday Hikes at Clinton State Park.** We will take a 2-hour hike each month on the 2nd Sunday each month. Meet at the State Park Office at 1pm. Each month we will hopefully get to see some of the plants and wildlife in that area of the park. You are welcome to bring children 5 and up and leashed pets. More information and updates: www.facebook.com/ClintonStatePark trudyrubick@yahoo.com or (785) 842-8562

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**Grassland Heritage Foundation Groundhogs.** See April 16 info.
June is Kansas Native Plant Appreciation Month! Each year Kansas Native Plant Society makes a formal appeal to the Governor for this proclamation. This opportunity promotes greater appreciation for the diversity, value, and beauty of Kansas native plants and their habitats. [www.kansasnativeplantsociety.org](http://www.kansasnativeplantsociety.org)

**Nebraska Wildflower Week** is a celebration of wildflowers and native plants in the wild and in the landscape through an array of events and activities across Nebraska. It is observed the first week in June, when prairies and gardens are typically at their prime. Sponsor: Nebraska Native Plant Society. Contact: Karma Larsen, Nebraska Statewide Arboretum klasren1@unl.edu (402) 472-7923.

**Spring/Summer Kansas Native Plant Society Board Meeting & Outings in Finney County, KS.** Meeting location to be determined in the Garden City, KS area. Botanizing, to follow board meeting, in several locations over two days, possibly including Sandsage Bison Range, Forest Park Lake, Lee Richardson Zoo for trees/landscaping, and Horsethief Reservoir. Any interested persons are invited to join us for any part or all of the activities. Watch the KNPS website and this newsletter for more information. Contact: Anthony Zukoff azukoff@gmail.com (620) 290-2411

**17th Annual Cowley County Wildflower Tour**, 7:30 am-1:30 pm. Tour a private ranch to view wildflowers and grasses in undisturbed prairie, Winfield, KS. Riding “hayrack” tour, wildflower identification walk with conservation specialist along with breakfast and lunch will all be included for a $5 registration fee. Please RSVP to the Cowley County Conservation District office by phone or email. Contact: Amanda Scott amanda.f.scott@ks.nacdnet.net (620) 221-1850, ext. 3

Symphony in the Flint Hills, Chase County, KS. Enjoy this unique pairing of music and prairie! The vision of this concert is to heighten appreciation and knowledge of the Flint Hills as the last major intact tallgrass prairie on the North American continent and will help focus attention on the Flint Hills of Kansas as a national treasure belonging to all Kansans and as a destination for people beyond our borders. Featured is an outdoor concert performed by the Kansas City Symphony. [www.symphonyintheflinthills.org](http://www.symphonyintheflinthills.org) (620) 273-8955

**2nd Sunday Hikes at Clinton State Park.** See May 8 info.

**Prairie Pollinators: Wildflowers and Butterflies Celebration at Tallgrass Prairie National Preserve, Cottonwood Falls, KS.** The National Park Service will be celebrating its 100th Anniversary and the 20th Anniversary of Tallgrass Prairie National Preserve. The annual Marvin Schwilling butterfly count will be held on Saturday. Some excellent presentations on both plants and insects are planned. Kansas Native Plant Society volunteers will be helping with displays, presentations, and plant tours. Contact Nancy Goulden nag@ksu.edu or the Tallgrass Prairie National Preserve (620) 273-8494 or (620) 273-6034.

**Grassland Heritage Foundation Groundhogs.** See April 16 info.

**2nd Sunday Hikes at Clinton State Park.** We will take a 2-hour hike each month on the 2nd Sunday each month. Meet at the State Park Office at 1 pm. Each month we will hopefully get to see some of the plants and wildlife in that area of the park. You are welcome to bring children 5 and up and leashed pets. More information and updates: [www.facebook.com/ClintonStatePark](http://www.facebook.com/ClintonStatePark) trudyrubick@yahoo.com or (785) 842-8562

**Grassland Heritage Foundation Groundhogs.** See April 16 info.

**2nd Sunday Hikes at Clinton State Park.** See July 10 info.

**Grassland Heritage Foundation Groundhogs.** See April 16 info.

**Kansas Native Plant Society’s 38th Annual Wildflower Weekend (AWW) will be in Fort Scott, KS.** We will visit natural areas in and near Bourbon County. Come enjoy native plants with us in beautiful eastern Kansas! The weekend is filled with outings, programs, a silent auction, photo contest, dinner, and socializing. For more information, please contact KNPS email@ksnps.org

Join the KNPS email list to receive the latest event announcements: [www.kansasnativeplantsociety.org/email_list.php](http://www.kansasnativeplantsociety.org/email_list.php)
The ancient woodlands at the Overland Park Arboretum hold about 40 species of native Kansas trees. The rocky bluffs in this woodlands formed 12,000 years ago. The meandering Wolf Creek runs through the middle of the arboretum from west to east dividing bottomlands to the north side of the creek and beautiful large rocky bluffs on the south side. These bluffs stretch across the rugged woodlands in the arboretum and this affords us some of the most beautiful native forests imaginable. In these beautiful woodlands you can take several marked trails through these giant trees and forget city life for an hour or so. These woodlands have many species of trees, shrubs, and vines naturally planted by Mother Nature. You will see several of the Great American Basswood trees.

The American Basswood tree is native in Eastern Kansas and Eastern North America. The basswood is also called American Linden. The Linden we use in our landscapes is usually the European Linden and more specifically the Little Leaf Linden as the European Linden does not grow as large or as fast as our native American Basswood. The American Basswood will grow two feet taller each year for several years and will be 75’ tall and nearly as wide if it has room to spread. It is a giant tree with thick foliage. The 3” to 5” wide green leaves are round to heart shape. The scientific name for the American Basswood is *Tilia americana*. Tilia being the Latin name and americana for where it was first found. The word bass in basswood is from bast which is the fibrous material inside the outer bark used by Native Americans and others to make rope like materials to use in their daily lives. Pioneers dubbed it “bastwood” leading to its common name of today. The young tender leaves of basswood when eaten as a fresh salad have a slight lime flavor. The fragrant, yellow, lime-scented flowers in spring attract bees and make honey with delicious flavors. The flowers are picked and used to flavor beverages with a honey-limetaste. In England the Brits refer to the linden tree as “Lime” or “The Lime” because of the lime like flavor and fragrance.

The largest American Basswood growing at the Overland Park Arboretum is near Wolf creek. Actually just a few feet above flood stage. The lower bluff trail will pass within a few feet of these special trees. Many smaller basswood are growing on the upper and lower bluff trails on dry, rocky ridges. Most of the American Basswood at the Overland Park Arboretum are multitrunk as this appears to be a natural occurrence. Unless the suckers at the base of the tree are removed Basswood will be a multitrunk tree. Basswood is a favorite tree of both honeybees and beekeepers. Its non-showy, fragrant flowers appear in late May or June and attract large numbers of bees which produce a distinctive tasting honey which is sometimes sold separately as “basswood honey.” The smooth wood is a favorite for woodcarvers and is also used for crates, barrels, slats, and veneer.
In January of 1848, John Brown, with eleven slaves tucked away in a covered wagon, was enroute to Nebraska when threatened by a posse across Straight Creek. Details of what ensued may be read today on The Battle of the Spurs historical highway marker on US 75 seven miles north of Holton.

Of course, in the 1840s the Kansas countryside would have abounded with indigenous plants. One hundred and sixty-six years later, some members of the Jackson County Historical Society (JCHS) here in Holton wanted to reintroduce native plants to the raised bed under the marker. As members of both JCHS and KNPS, we volunteered to supply, plant, and steward native plants there.

After a JCHS member obtained verbal permission from KDOT, we began in early spring 2015. Working around unusually high seasonal rains we removed the unsightly growth, added organic compost and soil, and by June 2, we began setting out native species of forbs and grasses that we potted for the site. We topped the new sprouts with a light mulch to preserve moisture.

The plants, all from our farm, ranged in size from two inches to seven feet, with smaller forbs in front of the sign, taller grasses and forbs behind it. We aimed for blooming times to span early spring to frost. Further work on the area around the raised bed revealed an asphalt walkway under three or four inches of soil and weeds. Over the summer, watering and occasional weeding carried all of the plants into fall. Now, as 2016 morphs into spring, we are looking forward to seeing what has survived the winter, and to begin regular visits again to monitor the site.

Samples of shorter plants at the site include Johnny-jump-up (Viola bicolor), Pussytoes (Antennaria neglecta), Slender fumewort (Corydalis micrantha), Prairie ragwort (Packera plattensis), Showy evening primrose (Oenothera speciosa), Prairie petunia (Ruellia humilis), and Rose verbena (Glandularia Canadensis). Mid-sized native plants include Serrate-leaf evening primrose (Calylophus serulatus), Autumn onion (Allium stellatum), Clammy-weed (Polanisia dodecandra), and Purple prairie-clover (Dalea purpurea). On either end of the sign and behind it we placed Bigflower coreopsis (Coreopsis grandiflora), Showy partridge pea (Chamaecrista fasciculata), Beebalm (Monarda fistulosa), Black-eyed Susan (Rudbeckia hirta), Grayheaded coneflower (Ratibida pinnata), Little bluestem (Schizachyrium scoparium), Sideoats grama (Bouteloua curtipendula), and Indiangrass (Sorghastrum nutans).

Information about the marker itself may be found at: www.thecivilwarmuse.com/index.php?page=the-battle-of-the-spurs-2

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**GOT A NATIVE PLANT EVENT?**

Now you can submit it yourself. The KNPS EVENTS CALENDAR network is the place to get the word out. Yes! If you want your event listed you must use the SEND EVENT INFORMATION form on the KNPS web site. It is conveniently linked from the EVENTS CALENDAR page. Event submissions from the form are reviewed by a KNPS volunteer before posting and a follow up proofing request is sent to the event contact email provided. We receive a lot of email about events and cannot process general announcements.

Events can be viewed anytime on the KNPS website and a weekly email mailing of upcoming events goes out to the KNPS Google Group. You can easily subscribe and manage your KNPS Google Group email preferences from the EMAIL LIST page.

– MATTHEW RICHTER
Plant Milkweed to Aid Monarchs

The 20-year declining trend line for monarch population numbers has been discouraging (Figure 1). And recently, after bad heat and drought in 2011 and 2012, monarch populations fell to perilous levels. The rise of herbicide-intensive, no-till farming has reduced the presence of host plant milkweed species (Asclepias spp.) throughout the Central United States (Figure 2). Thankfully the latest monarch population numbers show an encouraging annual increase based on overwintering area data (Figure 1).

What Can We Do?

With an interest in conserving the monarch butterfly, you or I may not be able hold much sway over changing practices in the agricultural industry and we certainly cannot prevent drought cycles, but we can plant milkweed.

It can be fun, easy, and rewarding to establish milkweeds, and I challenge everyone to take personal action in increasing milkweed populations. There are two ways to do this: 1) establish milkweed plants in the areas you landscape, and 2) distribute milkweed seed in a nearby unmowed area.

- **Plant Milkweed Plants** – Landscaping with native plants is rewarding and Kansans have at least eight commercially-available native milkweed species they can plant, including Swamp Milkweed (Asclepias incarnata), Common Milkweed (A. syriaca), Butterfly Milkweed (A. tuberosa), Green Antelopehorn (A. viridis), Showy Milkweed (A. speciosa), Smooth Milkweed (A. sullivantii), Prairie Milkweed (A. hirtella), and Whorled Milkweed (A. verticillata). These species can be purchased through Monarch Watch, Prairie Moon Nursery, Taylor Creek Nurseries, and Dyck Arboretum of the Plains FloraKS Spring Native Plant Guide. Plants establish and flower in the first year with proper care and provide beauty and insect nectar sources in addition to host plant larval food for the monarch.

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**FIGURE 1** | FROM MONARCH WATCH

**Monarch on aromatic aster (Aster oblongifolius)**

**Showy milkweed (Asclepias speciosa)**

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"Monarch butterfly populations are declining due to loss of habitat. To assure a future for monarchs, conservation and restoration of milkweeds needs to become a national priority."

- CHIP TAYLOR, DIRECTOR, MONARCH WATCH
- **Distribute Milkweed Seed** – Surely you know a grassland area along a nearby creek or waterway, in a park, or along a roadside that gets mowed or burned only periodically to keep it free of trees. Collect some seed from a nearby prairie or buy some seed of the species above from a native seed nursery (good sources include Kansas Native Plants, Prairie Moon Nursery and Missouri Wildflowers Nursery). Get permission to distribute your milkweed seeds in the fall or early winter so that germination will happen and establishment will begin the following spring. Common milkweed (*A. syriaca*) is the species most preferred by the monarch and is easiest to acquire and establish. Distributing seed is a very cost effective and easy way to establish milkweed where it does not currently exist.

![Common milkweed (Asclepias syriaca) with monarch eggs](image)

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**FIGURE 2** | **FROM MONARCH WATCH**

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**MEMBERSHIP NEWS**

**NEW MEMBERS FROM 12/06/15 TO 3/09/16**

- Al Alspach - Manhattan
- Nancy Austin - Shawnee
- Patti Beedles - Lawrence
- Claire’s Garden - Kirksville, MO
- Beth Clarke - Toronto
- Ruth Crawford - Lenexa
- Kalen Dillon - Wichita
- Dorothy Foster - Topeka
- Michele Funston - Topeka
- Constance Gehring - Newton
- Rebecca Gillett - Olathe
- Deborah Hardwick - Delaware, OH
- Stuart Hazard - Wakarusa
- Carolyn Kusmin - Leawood
- Karen McCabe-Juhnke - North Newton
- Bones Ownbey - Elmdale
- Chris Parsons - Manhattan
- Bruce Rayl - Strong City
- Alisha Rich - Wichita
- Janet Svoboda - Hutchinson
- Carol Tomlinson - Roeland Park
- Tracy Twombly - Blue Springs, MO
- Karen Wagstaff - Topeka
- Linda Ziegenhorn - Olathe

**MEMBER RETURNING AFTER A HIATUS**

- Sara Howard - Dodge City
One late summer day at our farm, I was out looking for whatever I might find, knowing that interesting and unusual discoveries often appear when least expected. I glanced up into the branches of a cedar tree and saw there dangling before me a green, oval “something” about the size of an egg and covered with prickles. It wasn’t hard to imagine that some woodland spook had been out playing tricks or had simply started its Christmas decorating early.

Not wanting to succumb to some superstitious notion, I went to my books and learned that the green, fleshy fruit I saw is called a pepo, and it is produced by the wild cucumber, *Echinocystis lobata*. Also called mock wild cucumber or wild balsam apple, this is a native annual vine that grows quickly in moist soil from seed to a 20-30 foot long vine in a single season. It has long tendrils that curl around anything it contacts, enabling it to ascend trees, fence posts, or simply to blanket the ground when there is nothing to climb.

The wild cucumber produces both male and female flowers, though the greenish-white male flowers are larger, fragrant and more conspicuous when they bloom in late July and August. Its green, fleshy fruit, the pepo, resembles a small rounded cultivated cucumber about two inches long but covered with long soft spines. When dry, the pepo puffs out, splits at the bottom, and drops its seeds to the ground. Unlike some plants’ inscrutable genus names, the *Echinocystis* is quite descriptive in the Greek: “echinos” meaning “hedgehog” and “cystis” meaning “bladder.”

This native vine and its pods can make attractive additions to dried arrangements when collected in the fall. Often considered a weed when climbing on trees, shrubs, or structures, it causes no harm and is a fascinating find when you encounter it. Neither endangered nor threatened, it is rare in Kansas, so if you find it, congratulations!

— LORNA HARDER ILLUSTRATION
Gardening With Native Plants: My Experiences
— MICKEY DELFELDER

As the former KNPS President, and current board member and Secretary, I am somewhat ashamed to admit that, until last summer, I had only a few native plants on my property (and most of those were deposited by birds). After a decade of reading about landscaping with native plants in the KNPS Newsletter (thanks to Ken and Jeff!) and reading several books like Douglas Tallamy’s Bringing Nature Home, I decided that it was time for a pollinator garden.

My yard once had nice, manicured flower beds, but eventually the Vinca, wintercreeper, and bermudagrass won out. By the fall of 2014, the garden was down to just a few hostas, a Japanese quince, and a large pampas grass.

I had about 800 square feet to work with, but it needed cleared, the fence needed replaced, I had to determine where my plants were coming from, and I was starting to run out of evening daylight hours, since it was already October. What I had gotten myself into?!

I worked in the fall, then again in the spring to clear the beds. I gave away a few plants, but I (sadly) resorted to herbicides to eliminate the unwanted groundcovers.

Thankfully, I had help propagating seeds that a friend and I had collected during 2014. We were both interested in growing plants to supplement our gardens and we figured that growing our own plants would be more economical than buying from a nursery. In the end, we were overwhelmed with seedlings and gave many of them away.

Spring 2015 arrived with a dead groundcover and nutritionally depleted soils. I cultivated the soil to a depth of 4 inches (or as deep as I could get in the hardpan) and probably tilled in one hundred bushel baskets of chopped leaves. (The single most significant piece of advice that I received was “stock up on chopped leaves” in the fall of 2014; I ended up using them in several ways.)

My landscaping plans were fairly straightforward: tall plants in the back, then medium, then short plants up front, with large groupings of the same or similar plants. Once the soil was prepped, I started planting the abundance of seedlings.

Luckily, the summer and fall of 2015 had plenty of rain (I only watered the entire bed five or six times). When planting seedlings, I backfilled with a potting soil and compost mixture which helped retain moisture. I used the remaining chopped leaves as mulch and I had only a few weeds.

Since I worked from home, I found myself visiting the garden multiple times each day. I invited (well, I coerced) everyone that I knew to come and visit. I enjoyed observing the growth throughout the year, but even more, I began searching for caterpillars and watching the pollinators on a daily basis.

I had dozens of Monarch caterpillars on the Swamp milkweed. I only had a few Black swallowtail caterpillars on Golden alexander, but I relocated others from a nearby garden that didn’t have enough foliage to support caterpillars. There were bees, wasps, moths, butterflies, and more; the garden literally hummed with life.

The garden is not finished, and it may never be done. I have more species that I want to add, and I need to augment the shade garden which did not get planted until August. As good as the destination is it is the journey that now excites me. I am definitely looking forward to more plants, more blooms, more insects, and more butterflies in 2016.

Although I started ambitiously with a large garden, I hope that everyone without natives will consider adding just a few this year. Here are my biggest takeaways:

• It is okay to start small. Container gardening is fine, but if you have just 10 or 15 square feet that is even better. Pick up a Swamp milkweed and some Bee balm at a plant sale. Or try planting Coneflowers or Purple prairie clover. Even just a few plants are better than none at all.

• Save your chopped leaves in the fall and use them for mulch. The leaves will breakdown and replenish the soil while reducing weeds.

• Fence in the plants or the entire garden to keep rabbits at bay. However, I gave up keeping squirrels out of the garden; they will do what they want!

• Explain to your neighbors why you support native plants and if you have extra seedlings, offer to share them.

• Take the time to enjoy the garden: search for caterpillars, learn about the pollinators, and observe what else is using the space.

Butterfly milkweed in the garden

Snowberry clearwing sphinx moth on clammyweed
MEMBERSHIP APPLICATION AND RENEWAL GUIDELINES
Annual dues are for a 12-month period from January 1 through December 31. Dues paid after December 1 are applied to the next year. Note to new members: the first year of annual membership is effective from the date of joining through December 31 of the following year.

Please complete this form or a photocopy. Send the completed form and a check payable to the Kansas Native Plant Society to:

Kansas Native Plant Society
R. L. McGregor Herbarium
University of Kansas
2045 Constant Ave.
Lawrence, KS 66047-3729

A membership to the Kansas Native Plant Society makes a great gift for friends and family members. Recipients of gift memberships will receive notification of your gift membership within two weeks of receipt of your check. The Kansas Native Plant Society is a 501(c)(3) non-profit organization. Gifts to KNP5 are tax deductible to the extent provided by law.

MEMBERSHIP APPLICATION/RENEWAL FORM

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