



KANSAS NATIVE PLANT SOCIETY

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NEWSLETTER OF THE KANSAS NATIVE PLANT SOCIETY

OCTOBER 2020

PAM MARTIN



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Kansas Wetlands Education Center: Interpreting wild, wonderful wetlands

— PAM MARTIN, KANSAS DEPARTMENT OF WILDLIFE, PARKS AND TOURISM
EDUCATION SPECIALIST

White pelicans kettling in an azure sky, bulrush and cattails swaying with the waves, butterflies and bees drinking greedily from globular button bush flowers, all scenes from the 41,000-acre wetland complex comprising Cheyenne Bottoms. Interpreting this wetland ecosystem for the public is the goal of the Kansas Wetland Education Center (KWEC), operated through a partnership between Fort Hays State University (FHSU) and the Kansas Department of Wildlife, Parks and Tourism (KDWP).

It was this partnership that culminated in a visitors' center at Cheyenne Bottoms. Discussion concerning a visitors' center began as early as the 1980s, with actual planning starting in the early 2000s when the Great Bend Convention and Business Bureau hired a consulting firm that recommended establishment of a center. The effort took off in 2003 when the Kansas Department of Transportation provided a \$2 million grant to what was then the Kansas Department of Wildlife and Parks for facility construction. Mike Hayden, KDWP Secretary, and Edward Hammond, FHSU President, combined forces raising additional funding. Local partners provided support through in-kind labor and supplies. After construction, KDWP deeded the building to FHSU which operates the facility in partnership with KDWP. Record flooding delayed construction for a year, but finally, in 2009, the center opened.

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OUR MISSION

The mission of the Kansas Native Plant Society is to encourage awareness and appreciation of the native plants of Kansas in their habitats and in our landscapes by promoting education, stewardship, and scientific knowledge.

The Kansas Native Plant Society Newsletter is published quarterly: Winter (January), Spring (April), Summer (July), Fall (October). Readers tell us how much they enjoy the newsletter in paper format. Contributions help us continue to produce a publication of this length in this form.

You may send your gift to KNPS at:

Kansas Native Plant Society
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Lawrence, KS 66047-3729

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Check us out online at www.ksnps.org
Contact us by email at email@ksnps.org
Contact us by phone at 785-864-3453

Fall Board Meeting Update | BRAD GUHR

The KNPS Board conducted its regular fall board meeting virtually on September 30, 2020. The following is a synopsis of the topics addressed.

- **Amendments to Bylaws** — We made upgrades to 1) validate the necessary process of conducting business virtually, 2) solidifying that the Nominating Committee is solely responsible for bringing forth new board member candidates, and 3) that board meeting parliamentary procedures follow Robert’s Rules of Order.
- **Statement of Editorial Policy** — We adopted an editorial policy for our newsletter that gives our editors more control over assurances that submitted content will follow the Society’s mission.
- **Plant-A-Prairie Update** — The PAP Committee reported that sixteen of twenty-three enrolled teachers are proceeding with their planting plans in 2020, and seven are deferring till 2021.
- **Budget Update** — The treasurer’s report cited that both income and expenses are understandably down in this pandemic year due to the cancellation of the AWW and that the result has no net financial impact on our budget. A suggestion to revisit our membership fee structure was tabled until the winter meeting.
- **Affiliation with Kansas City Conservation Equity Network** — We approved formal affiliation with KCCEN that promotes diversity, equity, and inclusion in the Kansas City region conservation community.
- **Committee Reports** — Received committee reports from Membership, Nominations, Awards, Website/Events/Publicity/Outreach, Public Policy, and Education Committees.

Please contact us at email@knps.org or 785-864-3453 if you would like more information about the meeting or KNPS in general.

KNPS Elections | CRAIG FREEMAN

The decision to cancel our fall 2020 in-person annual membership meeting due to the pandemic has required adjustments to a number of KNPS procedures, including elections. Typically, the Nomination Committee prepares a slate of nominees for the Board of Directors, which is voted on by members attending the annual meeting. The Nomination Committee also prepares a slate of nominees for officers. That slate is voted on by the Board of Directors at their fall meeting. The Board currently is developing a procedure by which the Board slate can be voted on by KNPS members in the next few months. During its September 30, 2020, Zoom meeting, the Board elected the following members each to serve one-year terms as officers: Mickey Delfelder, Secretary (Topeka); Earl Allen, Treasurer (Manhattan); and Krista Dahlinger, President (Mulvane). Following the KNPS Bylaws, Past President Brad Guhr will fulfill the duties of President-Elect until a nominee for that position is found.

STATEMENT OF EDITORIAL POLICY

The Kansas Native Plant Society (KNPS) Newsletter is published quarterly each year. It features writings, photography, and illustrations to fulfill the Society’s mission: to encourage the awareness and appreciation of the native plants of Kansas in their habitats and in our landscapes by promoting education, stewardship, and scientific knowledge. Newsletter content embraces the activities of the Society and includes articles relating to current conservation and ecological developments. The Newsletter accepts manuscripts, photographs, and illustrations for publication that relate to the Kansas Native Plant Society’s mission and activities. To assure journalistic independence and integrity, KNPS Newsletter editors exercise sole editorial control over submissions; editors retain the right to make changes and consult with the author(s) as needed. KNPS reserves the right to reject a submission even after it is accepted if it becomes apparent that there is inaccuracy in its scientific content, or KNPS publishing policies are violated.

President’s Message | BRAD GUHR & KRISTA DAHLINGER

BRAD GUHR (OUT-GOING PRESIDENT)

My final president’s address has me pondering four words that are not only important in the conservation of native plants, but they are also a part of organizational leadership for Kansas Native Plant Society.

STEWARDSHIP — A prairie needs timely and selective management, and so does a healthy organization. The board members of KNPS bring so much passion and expertise to their roles. Skills in event leadership, committee work, educational outreach, fiscal responsibility, administrative guidance, and forward-thinking inspiration are all represented in abundance with this team of overseers.

PATIENCE — Establishing a new plant community or native plant garden means the slow development of deep roots. Extremes in environmental conditions sometimes slow progress and our enjoyment of desired results. COVID-19 put a big pause on our 2020 plans for much anticipated events. While our enjoyment of these get-togethers has been delayed for good reasons, we know it will eventually come to fruition.

ADAPTATION — Just as native plants are able to persist through adversity, the KNPS Board showed resilience as it had to shift gears this year during the pandemic. Committees found new ways to engage, meetings went virtual, bylaws were expertly adapted for the times, and the new Plant-A-Prairie Program has excelled. Open minds and can-do spirits are prevailing during challenging times.

TRANSITION — As the growing season transitions to fall, our Board too will experience change. We celebrate the many valuable contributions of charter member, Iralee Barnard, and her 15 years of Board service. As she moves on to other pursuits, we will miss her steady presence. Finally, I have enjoyed my two-year term as president, and know that KNPS will have excellent guidance under new president, Krista Dahlinger.

KRISTA DAHLINGER (IN-COMING PRESIDENT)

I am honored to be moving into the role as the next President of KNPS. I have observed the members of the board in action for nearly two decades as they plan for local and statewide activities that promote a closer relationship between people, places, and native plants in Kansas. Past presidents have set wonderful examples to draw upon for setting meeting locations with accessible local botanizing opportunities, as well as interesting, cultural experiences. Board members hail from many different backgrounds and careers that add to the working knowledge base the board draws from for activities in which the membership is invited to participate.

I look forward to the next two years and beyond working with the board and the membership to continue to realize the KNPS motto, “...to encourage awareness and appreciation of the native plants of Kansas in their habitats and in our landscapes by promoting education, stewardship, and scientific knowledge.”



TOP TO BOTTOM Signs of Fall: *Helianthus maximiliani* in bloom; *Asclepias sullivantii* releasing seed; *Liatris punctata* and *Helianthus pauciflorus* in bloom.

BRAD GUHR PHOTOS

Kansas Wetlands Education Center

CONTINUED FROM PAGE 1

Since officially opening April 29, 2009, KWEC’s mission of “educating the public about wetland communities, their importance and the need for conservation and restoration, with emphasis on Cheyenne Bottoms and Quivira National Wildlife Refuge” has not changed, but several additions and improvements have occurred. The 11,000 square foot center includes a large auditorium and the Koch Wetlands Exhibit gallery with newly renovated interactive exhibits. A timeline tracing the history of Cheyenne Bottoms beginning 12,000 years ago encompasses the west wall. Interactive exhibits popular with children include an augmented reality watershed simulator, a wetland floor projection game, an activity area, build-a-bird and build-a-plant stations, adaptation magnetic boards, an aquatic invertebrate viewer and a section on wetland fauna. Adults and children enjoy the birdwatching station that includes a bird call component. Several live examples of local fauna are on display along with taxidermy mounts.

A large gift store contains an extensive collection of field guides for adults and children, a varied t-shirt selection, and nature- and science-oriented children’s items. Kansas artist creations from ceramics to photography complete the inventory.

Although the indoor exhibits are top notch, getting visitors outside to experience wetlands is paramount at KWEC. Since the birds and much of the other wildlife are acclimated to passing vehicles, KWEC offers guided van tours. For a nominal fee, participants choose between 30- or 90-minute tours led by FHSU graduate students. Guides point out flora and fauna while sharing historical and managerial information about Cheyenne Bottoms. Visitors may also climb the observation tower at the southeast end of the Bottoms and walk the half-mile nature trail located south of the center.

Additional buildings include a multi-purpose shelter used for programming and events, a cabin for graduate student housing, and a connected lab.



KWEC’s garden contains 30 species of plants, many of which are from Dyck Arboretum and the Dillon Nature Center plant sale.

INTERPRETATION IS KEY

On-site and outreach programming are key components to KWEC’s education mission. In addition to extensive school programming, KWEC staff provide field trips and on-site programs for libraries, recreation commissions, Girl and Boy Scouts, 4-H, home school groups, and various other organizations.

In September, KWEC hosts the Wetlands Day field trip for 400 Barton County second graders. Students rotate between seven stations all dealing with wetlands. The Friends of Cheyenne Bottoms assist with organizing the event.

Other special events include family programs throughout the year, summer camps in July, monthly Turtle Tots preschool programs, Perseid meteor shower event in August, hunter appreciation breakfast in October, holiday open house in December, quarterly STEM events, monthly Wild Club meetings, prairie chicken lek tours, and other timely events such as Earth Day celebrations. KWEC offers several outreach programs for organizations with various topics from a general overview of Cheyenne Bottoms to birds, butterflies, and wildflowers of Cheyenne Bottoms.

In addition, KWEC participates in several citizen science projects such as the NABA count, FrogWatch monitoring, Christmas bird count, and monarch butterfly tagging.

KWEC emphasizes getting the public immersed and excited about nature. KWEC has a large collection of waders in children and adult sizes, in addition to muck boots, used for macroinvertebrate sampling in the wetland. When campers say, “When are you doing the next one” and express dismay when you say, “Next year” you know you have made an impact. When students say, “This is the best field trip ever!” It makes the cleaning of fifty pairs of boots worthwhile.

BUTTERFLY FESTIVAL

KWEC’s largest event, the annual Butterfly Festival held in mid-September, draws up to 800 visitors. From the very youngest to the elderly, everyone gets into the act of finding monarch butterflies to tag. Armed with KWEC nets, participants head out to capture monarch butterflies. Tagging leaders help with the tagging process. Even if we do not hit migration peak, there are some monarchs to tag and kids are happy catching grasshoppers!

An insect zoo contains praying mantises and walking stick insects children and adults can hold and get to know. The zoo also contains live examples of the butterfly life cycle and the opportunity to watch butterflies feed. A fortunate few have even witnessed a caterpillar changing to a chrysalis and the emergence of adult monarchs.

Entertainment switches between “The Instars” (a humorous magic show interpreting the butterfly life cycle) and StoneLion Puppet Theater performing “Bubba and Trixie.”

Local beekeepers provide live exhibit hives along with bee keeping suits kids can try on for fun. Additional activities include kids’ crafts, a dress-up booth, a chance to add their “hand” butterfly to the butterfly mural, and making wildflower seed bombs.



KWEC’s garden makes the perfect backdrop for dress-up booth photos at the butterfly festival.

Each family receives a swamp milkweed plant to take home with them and can wander through the pollinator/wildflower garden to see native wildflower plantings. The master gardeners provide a booth on composting.

POLLINATOR/WILDFLOWER GARDEN

Plant it and they will come. And “they” definitely have come, since the demonstration pollinator/wildflower garden was established. Planted predominantly with native wildflowers and the addition of some specific non-native pollinator plants, the garden attracts a host of insect pollinators, birds, reptiles, amphibians, and mammals. Due to a combination of poor soil and harsh environmental conditions, establishing the garden and determining which species would survive was challenging.

The garden project began in 2010 with assistance from many volunteer sources. The Nature Conservancy helped prepare the area and bring in compost. Funding was provided through several sources: Outdoor Wildlife Learning Site and Chickadee Check Off funding through KDWPT, gift from the Kansas Associated Garden Club, memorials and donations from individuals, businesses, and organizations. Barton Community College biology students dug out the sidewalk area and a local Girl Scout Troop adopted the garden as a project, helping plant and weed.

It was soon discovered a wind break was needed as plants withered and died within hours of planting. The water feature also had to be protected from wind that pushed water out of the fountain bowls in under two hours, so a fence and three-sided trellis were added.

Ten years later, the garden is host to several native plant species and an annual bed that provides nectar and pollen sources when the native species decline in mid-summer. It also serves as a demonstration garden of species that will survive harsh conditions which include penstemons, gaillardia, coreopsis, liatris, sages, purple poppy mallow, Maximilian sunflower, flax, asters and yarrow.

Six species of milkweed draw monarch butterflies as a food and host plant. They also attract bumble bee species and other butterfly species. Plants in the parsley family, including the perennial golden Alexandra, bring black swallowtails, and angelonia is full of American buckeye caterpillars.

KWEC uses the garden as a teaching tool for all ages. This summer, campers conducted a jelly experiment with the resident Baltimore and orchard orioles, offering different types of jelly to see if grape jelly was indeed preferred. Although the orioles ate all four jellies, they preferred grape and strawberry as opposed to blackberry and apple which had lower sugar content. Students study plants and insects in the garden, and each summer, “Gifts from the Garden” adult classes are offered which have ranged from edible flowers to eco printing.

Whether it is providing school programming, events, a van tour, or talking to visitors, KWEC strives to portray the wild, wonderful nature of wetlands.

KWEC is open Monday through Saturday, 9:00 a.m. - 5 p.m., and Sunday, 1:00 - 5:00 p.m. It is closed on Mondays, Nov. 1 through March 31, and major holidays. Contact: Phone - 877-243-9268 or 620-566-1456 Website: wetlandscenter.fhsu.edu



Golf balls mark annual plant placement for the formal portion of the garden.

PAM MARTIN PHOTOS



LEFT Alcove Spring
ABOVE American columbine (*Aquilegia canadensis*)

FEATURED NATURAL AREA Alcove Spring Park

— ANDREW MITCHELL

On just one trip in May, my kids and I discovered that there are many places in Kansas that provide both historical and botanical value, while providing a place to hike. Alcove Spring Park is one of those locations. Located just a stone's throw from Marysville, I had never known about it until fellow native lover, Nadine Champlin, had mentioned it to me the year before.

Alcove Spring was discovered by the infamous Donner Party in 1846, while waiting for the Big Blue River to go down for crossing. The springs are along the Oregon Trail and were used by many pioneers as they, too, waited for the crossing of the Big Blue to be easier.

In 1993, the spring and a surrounding 223 acres of prairie and woodland were purchased and opened to the public. The park is listed on the National Register of Historic places.

After hiking the short trail to the spring, my kids and I marveled at its natural beauty and all the names carved into the soft limestone

by pioneers and visitors alike. The spring itself is set into an “alcove”, where water flows endlessly into a small pool, then runs away down the hill. Just down the path I found native columbine (*Aquilegia Canadensis*) growing in the shade.

While my kids are not up to hiking long distances without much water as I am, they did go down the prairie paths with me for a bit where I saw many natives, including blue false indigo (*Baptisia australis* var. *minor*) and old plainsman (*Hymenopappus scabiosaeus*).

To get to Alcove Spring Park from Marysville, head south on Highway 77 approximately .75 miles to East River Road, and turn west (right) onto East River Road. Follow East River Road about six miles, Alcove Spring Park will be on the east side of the road (left). The road is gravel and bumpy, so travel slowly. The park is open from dawn to dusk.

Happy hiking!

Supporting Native Habitat Restoration and Pollinators in Western Kansas

— ANTHONY ZUKOFF

This summer, KNPS received a non-profit funding application from the Nature Conservancy's Smoky Valley Ranch. Located in western Kansas, Smoky Valley Ranch consists of almost 18,000 acres of high-quality native shortgrass prairie nestled in the unique chalk badlands region of the state. The Nature Conservancy recently purchased an additional 760 acres of private cropland that was located at the very center of the ranch and was seeking support from KNPS as well as a monetary award that would lead to larger funding from the federal government. The Conservancy plans to restore this land to native grasses and forbs which shall include species that will support the Monarch butterfly on its migration in the spring and fall as well as a variety of other important native bees. The restored area will function also as a permanent seed source of critical pollinator wildflower species for adjacent pastures on the ranch. Another important aspect of this project is to examine the variables that influence pollinator habitat establishment in the challenging semi-arid landscape of western Kansas where habitat restoration is rarely

successful. In particular, the project will look at the effects of the soil microbe biome, soil characteristics, timing and quantity of precipitation, temperature, timing of seeding and seedbed preparation on germination and establishment of native grasses and forbs. In addition to pollinators, this restoration will also benefit another imperiled western Kansas species, the lesser prairie chicken, by providing ideal nesting and brood habitat. KNPS was happy to support this project and looks forward to tracking its progress. If you are in western Kansas, Smoky Valley Ranch is a must-see destination.



Western Kansas (*Echinacea angustifolia*)

ANTHONY ZUKOFF

FEATURED PLANT

Leavenworth Eryngo | (*ERYNGIUM LEAVENWORTHII*)

— JIM MASON

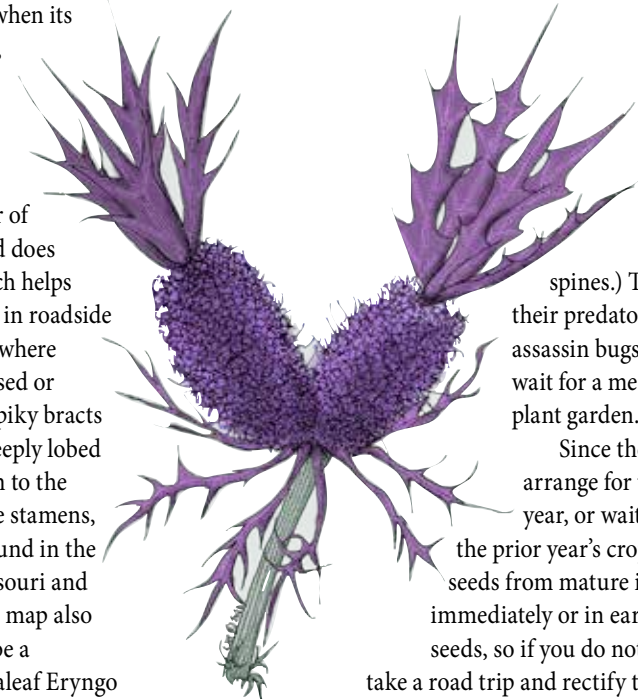
Leavenworth Eryngo (*Eryngium leavenworthii*) is an unusual and striking plant that caught my eye early on when I began to take an active interest in Kansas wildflowers. I was driving a back road in the southern Flint Hills one fall day when its vibrant purple blooms made me stop, get out and take a closer look. I discovered the blossoms resembled prickly pineapples and the plant had equally prickly foliage.

Leavenworth Eryngo is a member of the Parsley family. It is an annual and does well in shallow, calcareous soils, which helps explain why one can expect to spot it in roadside rights-of-way, especially at road cuts where underlying limestone strata are exposed or nearly so. The foliage resembles the spiky bracts subtending the inflorescence, with deeply lobed margins ending in spines. In addition to the bright purple of the inflorescence, the stamens, when present, are a deep blue. It is found in the southern Great Plains, as well as Missouri and Arkansas. The USDA PLANTS range map also shows it in Wisconsin, but that may be a questionable record. Its cousin, Yuccaleaf Eryngo (*E. yuccifolium*) is widespread in tallgrass prairies in Kansas and the eastern U.S. Its grass-like foliage also has spiny edges but its inflorescence is a compact white ball reminiscent of buttonbush.

The bloom period runs from late summer into fall. The flowers retain their color when harvested in full bloom and carefully dried, making for an enduring, attractive addition to a dried flower arrangement.

The flowers are very attractive to pollinating insects, which is an inducement to add this species to your home landscape. Many butterflies and bees will come to sip nectar from Leavenworth Eryngo. (They are apparently OK with the spines.) The high traffic in insects may attract their predators also. Flower crab spiders and assassin bugs may show up on the flowers and lurk in wait for a meal. It is all part of the charm of a native plant garden.

Since they are annuals, gardeners must either arrange for their placement in the landscape each year, or wait to see what volunteers show up from the prior year's crop – if any. To cultivate them, gather seeds from mature inflorescences and either plant them immediately or in early spring. Autumn is the time to harvest seeds, so if you do not have any in your garden yet, you can take a road trip and rectify the lack. Thistles, prickly poppy and teasel are other prickly fall bloomers that may be found in similar habitat, so look carefully and do not harvest those by mistake (unless you want them also!).



— LORNA HABEGGER HARDER ILLUSTRATION

Bachle Receives Bancroft Award

— CRAIG FREEMAN

Mr. Seton Bachle has been named the 2020 recipient of the Mary A. Bancroft Memorial Scholarship Award by the Kansas Native Plant Society. The Bancroft Scholarship Award supports graduate student research that enhances our understanding of native plant species or their ecosystems, and prairie conservation. Mr. Bachle, a Ph.D. candidate at Kansas State University, received the \$1,000 cash award in July to support his studies. His project, “Response of the tallgrass prairie and *Andropogon gerardii* to an experimental multi-year drought,” will examine the potential impact of reduced precipitation on the physiology and anatomy of big bluestem, one of the dominant plants of the tallgrass prairie. The research will help ecologists, ranchers, and land managers understand how drought may affect big bluestem and, in turn, productivity and species richness in the tallgrass prairie ecosystem.

Application for the Mary A. Bancroft Scholarship Award is open to all graduate students regularly enrolled in a Kansas college or university. Established in 1998, the award honors the late Mary A. Bancroft of Ottawa, Kansas, a long-time member and supporter of KNPS. Twenty students at seven colleges and universities have been recipients of the award.

TECH NOTES

— KRISTA DAHLINGER

Every year since 2007, KNPS has requested that the Governor proclaim a Native Plant Appreciation Month - usually the month of June, but for 2020 the month of September. Each year the Governor signs an official “Proclamation by the Governor” that describes the beauty of Kansas native plants, the habitats and regions where they are found, and the value of study and education about native plants as well as the need to preserve the remaining prairie in Kansas. Take a minute to go to the website and read the full Proclamation and all the appreciation expressed therein.

<https://www.kansasnativeplantsociety.org/proclamation.php>

SUMMER SAUNTERS

Jeffrey Energy Center Offers More Than Prairie — The Views Are Spectacular

— JOAN MANOR

As we cross the northern Flint Hills, three steam funnels spewing a trail of smoky steam into the air are visible on the skyline. One would almost anticipate seeing a prairie steamer come into view as we approach, perhaps journeying along some river in the Topeka area. It is instead, Jeffrey Energy Center, the home of a coal-fired power plant owned by Westar Energy (now Evergy).

A visitor to the area might expect some high security measures around an energy plant, so the area nearest the plant is secured by fencing and security personnel, however, visitors are welcome. Access to Jeffrey property is permitted, and partnerships with Kansas Parks and Tourism makes a variety of access points possible. If needed, the area will be secured if an imminent threat is identified.

This is a wild area of the Flint Hills, abundant with native and unbroken prairie, making it a good resource for native plant enthusiasts. It may not be the most accessible of sites, however, during some seasons, there are migrating birds to observe, and the multiple environmental efforts of the center make a visit worthwhile. The center came about in the 1970's, when oil

prices soared and an energy crisis resulted. Land was purchased for the site, and now features 1,400 acres of public hunting and fishing land; 5,200 acres of hunting and fishing land that is accessible with written permit; 20 acres of land dedicated to environmental education and walking trails along the historic Oregon Trail; and 3,500 acres of wildlife refuge that is closed to the public.

It would be difficult to do justice to this property in a single day. First, the size and accessibility demands some driving, walking, and investigation. Some of the property is leased to ranchers for grazing cattle; it is fenced and posted.

However, on the west and north are areas designated as walk-in areas and those can be entered. Because much of the area is unbroken prairie, every visit is rewarding because new plants have emerged and others are passing to the seed stage. Grasses will appear in various stages of growth. The gravel/

dirt roads are primitive and even the ditches make native plant viewing possible without walking into fields.

Second, there is such a variety of areas available to the public; one would want to make several trips. One can enter the interior

acreage by reporting to the security office at the center and making a request. There are two ponds available for fishing and visiting and fields available to see native plants, although work crews are developing and refining some areas and those would not be desirable. The third lake located nearer the plant is not open to the public as it is a part of the filtration system. In addition, a newer filtration lake is being molded for use. The day I was there, the Kansas Wildlife officers were netting fish, which afforded some entertainment. Ranchers had cut the hay and both balers and haulers were on the roads. I want to return, however, during bird migration for observing the thousands of birds that settle into the lakes there.

Third, the educational area set aside for the public is worthy of a visit in itself. This area is almost directly north of St. Mary's, Kansas and is commonly referred to as Oregon Trail Nature Park, although the name has changed to Burchett-Henson Memorial Park in memory of two employees killed in a plant accident. The nature park has several trails of varied difficulty. Some are paved and easily walked, but the Sea of Grass Trail takes the walker up to the crest and overlook of the pond on the energy center grounds. Along that and other trails are areas to walk into native vegetation, areas of overlook of the valley, and many areas to simply observe local flora and fauna. There are restrooms available as well as a picnic shelter. The history of the Oregon Trail is painted on the silo near the entrance (currently being reconstructed).

During several trips to areas of the energy center property, many birds were observed, including eagles and hawks, heron and turkey. The energy center is also the nesting area of the Least Tern, which although endangered, has found to its liking the fly ash around the plant, it is thought because it reminds them of their native habitat. These birds come to nest yearly and that area is now fenced by electric wire to protect the birds.

There are, of course, many areas in the Flint Hills to find native plants, but this area offers some other points of interest as well. It affords a good opportunity to talk about Kansas energy production and some of the problems associated with power plants, as well as the environmental efforts to produce that energy cleanly. The ponds are good local resources for fishing and birding, and when visiting the area the history of settlement of the prairie and the country is well documented. Most central is the opportunity to identify native plants. They are abundant and undisturbed, and when you get tired of looking down, look up – the views are spectacular!



Indian grass (*Sorghastrum nutans*) in seed

SUMMER SAUNTERS

One Day Botanizing Trips

— PHYLLIS SCHERICH

What does one do when the Garden City Mini-AWW and the Fall AWW at Pittsburg had to be cancelled due to Covid19 restrictions? Our answer was one-day botanizing trips mostly for two. The many recently-cancelled events (KNPS and otherwise) led to more free time for trips, and we took full advantage of that time.

I am fortunate that my husband, Dee, appreciates botanizing as much as I do. However, not wanting to spend nights in a motel, we were limited by the distance we could travel to view plants. Since moving to McPherson, we have discovered that there are many different biomes within less than a two-hour drive, and to those we were drawn.

Our first trip in early April was to the Geist Cemetery near Turon where we had seen many anemones last year. We only found a few there this time, along with henbit, Johnny jump-ups, slender fumewort and small bluets. This is the cemetery where some of my ancestors were buried. A highlight of this trip was finding a large ten-point deer antler still attached to the skull.

Early in May we learned the Indian paintbrush was blooming at the Paintbrush Prairie near Welda. We were blessed to find that Gary and Mary Tegtmeier happened to be there when we arrived, so we had the opportunity to visit with them and spend time absorbing the beauty of the vast showing of Indian paintbrush and the great variety of wildflowers in bloom. They pointed out the rosettes of the Mead's milkweed, and then later Phyllis Leudke took us nearby to see shooting stars: all three firsts for us in Kansas.



Indian paintbrush (*Castilleja coccinea*) blooming at the Paintbrush Prairie near Welda.

Gary E. Tegtmeier of Westwood, Kansas passed away peacefully the morning of July 4 in the home of his devoted partner, Mary Kowalski. He died just two days shy of his eightieth birthday following nineteen months in treatment for leukemia. Gary leaves a legacy of having preserved and improved thousands of acres of native tallgrass prairie.

Other trips throughout the spring and summer of 2020 brought much variety; listed are a few we saw in each area.

Harvey Co. West Lake: several varieties of violets; too early for much bloom, but a beautiful lake.

Marion Co. Lake: Nuttall's death camas, Missouri evening primrose, pale evening primrose, bread-root scurf-pea.

Private ranches in Barber and Kingman Counties: creamy poison-vetch, lemon beebalm, clammy ground-cherry.

Private prairie in southwest McPherson County: cinquefoil, blue wild indigo, sensitive mimosa.

Hutchinson Orchard Park: butterfly milkweed, purple cone flower, sulfur cinquefoil, Carolina puccoon.

Coronado Heights: leadplant, yucca, deptford pink; wild rose, St. John's wort.

Maxwell Game Preserve: red clover, hedge morning glory, spiderwort.

Dyck Arboretum: standing cypress, American germander, white prairie clover.

Chase County Lake: tuberous Indian plantain, American water willow, stickleaf mentzelia.

Wilson Lake: narrow-leaf bluet, rose verbena, stiff goldenrod.

As I write this, we are looking forward to more one-day forays to view the late summer/fall blooms: starting with the prairie gentians and yellow eastern cleomella we located in McPherson County. Later we did find the prairie gentians and yellow cleomella where we had seen them before, but neither was as prolific as we had previously seen.

But one does not need to plan a special trip to find a wide variety of wildflowers! In early August as we were leaving Hutchinson we noticed an unmowed roadside at the corner of K61 and 56th Avenue. We found a place to pull off the road, then, with camera in hand, we began to explore. One of the first plants to grab our attention, ouch! was the buffalo bur. As we carefully picked our way we discovered a host of plants in bloom: scratch daisy, field snake cotton, black-eyed Susan, Illinois tickclover, four-point evening primrose, tall goldenrod, noseburn, one of the crotons or spurge, prickly poppy, annual eriogonum, plains/tickseed coreopsis, camphor weed, redroot, sensitive partridgepea, Illinois bundle-flower, black medic, upright coneflower, velvet gaura, and purple prairie clover. In addition, there were many plants we could identify that had already gone to seed. Among them were lemon beebalm, wild lettuce, sand hill plum, and prickly pear cactus. We noticed pitcher sage and other goldenrods and sunflowers yet to bloom. Not to be outdone were the grasses! Big and little bluestem, purpletop tridens, sand paspalum, sideoats grama, prairie sandreed, buffalo bur sandbur, and yellow foxtail were most prevalent. Now, can you guess the environment? Sandy soil, sloped sidehill with moist area below: disturbed area.

I hope you find opportunities to get out to learn about and enjoy what beautiful treasures the fields, prairies, road-side ditches, and parks near you have to offer.



Shooting star (*Dodecatheon meadia*)

Prairie Walk at Banner Creek Reservoir

— ANDREW MITCHELL

On Friday, August 28, KNPS and Pheasants Forever members joined together in a prairie walk led by Courtney Masterson. The walk was sponsored by the Pheasants Forever chapter of Nemaha County, the Quail Forever chapter of Nemaha County, and the Kansas Department of Wildlife, Parks and Tourism. It was held at the Banner Creek Science Center on the west side of Banner Creek Reservoir just west of Holton.

This prairie walk was a summer highlight for those who attended; supper was provided and water was available as it was a hot evening. The walking tour started around 6:30 pm and focused on natives and prairie restoration and management. Beforehand, Brandi McCoy (of Nemaha County Pheasants Forever) had flagged different species of plants to look at: some thirty to forty in total!

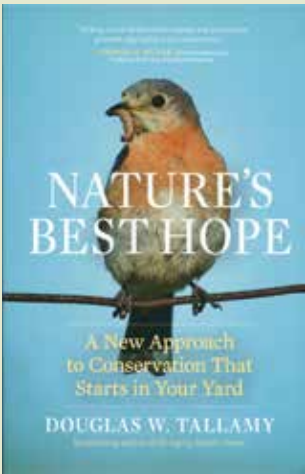
Topics of discussion included rarity of plants, burning recommendations, and land management. The walk ranged over several acres of prairie that is under restoration. Some of the natives seen included sessile-leaf tick-trefoil (*Desmodium sessilifolium*), fragrant cudweed (*Pseudognaphalium obtusifolium*), and late boneset (*Eupatorium serotinum*).

Happy hiking!

RIGHT Fragrant cudweed (*Pseudognaphalium obtusifolium*)



ANDREW MITCHELL



BOOK REVIEW

Nature's Best Hope by Douglas W. Tallamy

— LORNA HARDER

"Wherever we are, there too is nature with all its mystery and wonder." — John Burroughs

"Conservation biology ... [is] a discipline with a deadline." — E.O. Wilson

In the Introduction, Tallamy writes, *Nature's Best Hope* is a book about a cure for that

[environmental] pox – a cure that will require small efforts by many people but that will deliver enormous physical, psychological, and environmental benefits to all.

Thus begins Tallamy's premise that conservation of native landscapes is critically important, and that it starts in the landscape outside our doors and windows. Whether large or small, urban, suburban or rural, we can all participate in creating homegrown versions of national parks, parks of which we become the knowledgeable caretakers and stewards.

Tallamy highlights the role of landscape function in the conservation effort. Functioning landscapes work: recycling nutrients, holding water, building soils, sequestering carbon, attracting wildlife, and providing us with the endless beauty and curiosities of nature in motion. While the basic concepts presented may be familiar to many of us, the presentation of data, examples, and fresh perspectives provide a conservation model that can involve every citizen.

Just some of the noteworthy points include:

• **Native Plants.** Tallamy provides ample evidence that native plants provide many times more resources – e.g., food, breeding, nesting, over-wintering habitat – than do non-native species.

• **Insects.** E. O. Wilson notes that, "Insects are the little things that run the world." Tallamy encourages us to invite them in by planting insect food plants. www.nwf.org/nativeplantfinder has compiled listings for native host plant species for every county in the U.S.

• **Oak trees.** Across North America, oak trees that are native to each area act as keystone plant species. Tallamy describes their major contributions to wildlife diversity within a landscape by sustaining dozens of species of insects, birds, and mammals.

• **Interactions.** We typically select native plants based on color, blooming time, height, exposure, soil requirements, etc. Tallamy suggests we include diversity of interactions in our native plant selection process, native plants that attract multiple pollinator species, that feed multiple insect species, and that provide breeding habitat to multiple bird and mammal species. Diverse interactions create connectivity in a natural community, further promoting function and resilience.

• **Alien species.** Introduced species and especially invasive species reduce diversity, interactions, and ultimately they reduce a native plant garden's function. Tallamy recommends natives only, and removal of invasives.

In addition to the reasoned conservation approach to urban native plant gardening, Tallamy provides starting points and a FAQ section. Gardeners at all levels of understanding and experience will find useful information in initiating and/or building upon existing native landscapes.

Finally, Tallamy encourages the reader to spread the word. We can become part of an evolving mosaic of urban "homegrown national parks," a mosaic that creates a connected, functioning community of plants, wildlife, and people; and I think this final note truly encapsulates the mission, the purpose, and the community of people who make KNPS the great organization that it is!

2020-21 KANSAS AREA NATIVE PLANT & WILDFLOWER EVENTS

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!

Before you travel, use the contact information to confirm an event is still happening and not cancelled or rescheduled.

NOVEMBER | 10

PRAIRIE ECOLOGY HIKE at Missouri Prairie Foundation's Carver Prairie, 4:30-5:30 pm. Newton County, MO. We will be walking on uneven ground in the native grassland. Limited to twelve participants, social distancing will be practiced; **to register please email Jeff Cantrell at jeff.cantrell@mdc.mo.gov. <http://www.moprairie.org>, 888-843-6739.**

DECEMBER | 16

NATURE BOOK CLUB hosted by Lawrence Public Library in Lawrence. Join us to talk about fiction and nonfiction literature connected to the natural world. New book recommendations from co-leaders Jake Vail and Shirley Braunlich and other book club members. Meet 6:30-8:00 pm at Lawrence Public Library or via Zoom. **Contact Shirley to RSVP: sbraunlich@lplks.org, 785-843-3833**

APRIL | 20

GO NATIVE! Restoring the Ecology of Your Backyard for Birds by Brad Guhr.

Free presentation hosted by Wichita Audubon from 7-9 pm at Great Plains Nature Center. **Contact Rachel Roth liibluestem@gmail.com, 316-213-9527.**

JUNE | 12

JUNETEENTH WILDFLOWER WALK in conjunction with the Geary County Stone Soul Festival. Juneteenth marks the end of formal slavery in the United States—a milestone along our freedom-way. The prairie embodies freedom! Co-sponsored by Audubon of Kansas with the Junction City Juneteenth Community Association. **Find out more from aok@audubonofkansas.org, 785-537-4385.**

DATES NOT SET: THE 26TH NORTH AMERICAN PRAIRIE CONFERENCE will take place at The Meadows Events Center in Altoona, Iowa on the northeast side of the Des Moines metro. The theme is "Prairie Conservation in a Changing World." **Learn more: www.northamericanprairie.org/, contact: Anita O'Gara aogara@inhf.org, or Conference Chair Tom Rosburg thomas.rosburg@drake.edu, 515-271-2920.**

SEPTEMBER | 2021

DATE NOT SET: KANSAS NATIVE PLANT SOCIETY'S 42ND ANNUAL WILDFLOWER WEEKEND (AWW) is in Pittsburg. Enjoy a full weekend of outings, board meeting, membership meeting, programs, silent auction, photo contest, lunch, and socializing—join us! **Watch for updates soon!**

SEPTEMBER | 24-26

THE 2021 PRAIRIE FESTIVAL AT THE LAND INSTITUTE, Salina. The festival features speakers, art, music, dancing, guided prairie walks, bird watching, children's activities, and food. Live streaming access is available! Contact: www.landinstitute.org. 785-823-5376

Join the KNPS email list to receive the latest event announcements: www.kansasnativeplantsociety.org/email_list.php

MEMBERSHIP NEWS

NEW MEMBERS FROM 6/08/20 TO 9/13/20

Maggie Adler – Prairie Village
Matthew Allen – Lawrence
Erin Brockwinkel – Shawnee
Debra Carson – Derby
Rose Carson – Derby
Kelly Chanay – Holton
William Cooper – Ulysses
Sabrina Gregersen – Lawrence
Jane Hanni – Topeka
Gail Janke – Shawnee

Kathy Jenkinson – Leon
Brian Johnson – Olathe
Billie Lenz – Louisburg
Patty Marlett – Wichita
Monet Aquatics – Overland Park
Jerome Peterie – El Dorado
Warren Rensner – Goddard
Kimberly Rosel – Shawnee
Darren Roubinek – Merriam
Kevin Siek – Topeka

Malcolm Snead – Lawrence
Judith Storandt – El Dorado
Joan Toben – De Soto
Barbara Varanka – Merriam
Christopher Walters – Wichita
Diana Weaver – Lawrence
Beth Welsh – Lenexa
David Williams – Overland Park
Indigo Crow Yoga – Waverly
Jennifer Zollinger – Wichita

CHECK YOUR MAILING LABEL

Want to know the status of your KNPS membership? Check the mailing label on the back of each issue for your membership expiration date.

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TOP, L TO R Coffeetrees at Black Bob Park; Fruit and red rachis
BELOW Leaf of coffeetree

The Kentucky Coffeetree

— JIM EARNEST

I love trees, and one of my favorites is the Kentucky coffeetree (*Gymnocladus dioicus*). They prefer to grow on the edge of our native woodlands where there is less competition and may grow in small clusters as a result of root sprouting. The Kentucky coffeetree is native in Kansas and Missouri, as well as every other state in eastern North America except for Florida and Louisiana. Very beautiful, mature and healthy coffeetrees planted by humans can be seen at Black Bob Park, Loose Park, and in the Stous Promenade at the Overland Park Arboretum.

There are only two other species in the *Gymnocladus* genus, and both of them are native to Asia. The scientific name *Gymnocladus dioicus* comes from the Greek *gymnos* (naked) and *klados* (branch) referring to the large coarse branches of the tree that remain after the leaves have fallen. *Dioicus* means the tree is dioecious — that is, male and female flowers are borne on separate trees. The Kentucky coffeetree is a member of the pea or legume (*Fabaceae*) family.

The alternate leaves of the tree are bipinnately-compound. Leaflets are arranged like a feather along a central rachis that is



Fruit and seeds

red in color. While the individual leaflets are less than two inches long, the entire leaf assembly of the coffeetree is the largest of any North American tree, often attaining a length of three feet. They are among the last leaves to emerge in the spring, thus allowing sunlight to reach the vegetation below. The new leaves are an attractive pink-bronze color and by summer they become a dark bluish-green. Fall color is yellow and contrasts nicely with the red color of the central rachises that remain on the tree for a while

after the leaves have fallen. Positive identification of trees in the winter may be difficult. Spotting these long rachises after they have fallen to the ground below the tree, however, helps you know you are standing under a Kentucky coffeetree.

The coffeetree grows about ten to fourteen feet in ten years, ultimately becoming sixty to eighty feet tall with an open irregular oval crown. Its bark is rugged and rough with scaly ridges curling outward along the edges creating a very unique bark pattern.



Flowers occur in long terminal clusters, and the females are mildly fragrant. The panicles of the male flowers are about three inches in length, and the females are twelve inches long. They are not particularly conspicuous as they get lost amongst the new foliage. Female flowers give rise to large leathery seedpods that are harder, shorter, and straighter than the pods of the honey locust (*Gleditsia triacanthos*). Inside the pods are very hard, dark brown, marble-sized seeds that are surrounded by a gooey pulp. Native Americans cooked these seeds to make a coffee-like drink, thus the name “coffeetree”, and although drinkable, early settlers quickly realized it was a poor substitute for the real thing. The seeds are toxic when consumed without roasting. Wildlife must sense this, or they avoid the hard seed coat, as none seem to feast on them.

Unfortunately, the Kentucky coffeetree is under-utilized in the landscape industry. It has no serious disease or insect problems. With its bold form, contorted branching, large handsome leaves, and interesting bark and fruit, it has ornamental value in all seasons. If you have plenty of room, you should consider planting one of my favorite trees.

2020 KNPS PHOTO CONTEST WINNERS

WILDFLOWER OF THE YEAR

- 1ST: BAPTISIA AUSTRALIS, BROWN CO. – ANDREW MITCHELL
2ND: ALBINO BLUE INDIGO – BRIAN MARTIN
3RD: BLUE WILD INDIGO, COMANCHE CO. – PHYLLIS SCHERICH



FAUNA

- 1ST: RED MILKWEED BEETLE – BRIAN MARTIN
2ND: MONARCH AND BLACK SWALLOWTAIL – DENNIS KAUFMAN
3RD: LEAFCUTTER – BOB BROYLES



2020 KNPS PHOTO CONTEST WINNERS



FLORA

- 1ST: CUP PLANT – EMMETT SULLIVAN
2ND: CATCLAW – DENNIS KAUFMAN
3RD: BUTTERFLY MILKWEED, NW OSAGE – DENNIS KAUFMANN



GARDEN

- 1ST: SPLIT RAIL NEIGHBORS – STEPHEN N P
2ND: PINCUSHION CACTUS – BRIAN MARTIN
3RD: BACKYARD NATIVES – STEPHEN N P



SCENERY

- 1ST: MARCH PRAIRIE BURN – DENNIS KAUFMAN
2ND: DISTANT HILLS – VALERIE WRIGHT
3RD: BEAUTIFUL DAY – STEPHEN N P



PEOPLE

- 1ST: EXPLORING THE PRAIRIE – DENNIS KAUFMAN
2ND: TAKING INVENTORY – STEPHEN N P
3RD: QUIET MOMENT – ANN MANZARDO



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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. See upper right of mailing label for expiration date.

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

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 KNPS are tax deductible to the extent provided by law.

Kansas Native Plant Society welcomes everyone to join our membership. Read our full Statement of Diversity, Inclusion, and Non-Discrimination Policy on the website, ksnps.org.

MEMBERSHIP APPLICATION/RENEWAL FORM

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