



KANSAS NATIVE PLANT SOCIETY

VOLUME 45, NUMBER 1

NEWSLETTER OF THE KANSAS NATIVE PLANT SOCIETY

JANUARY 2023

IN THIS ISSUE

President's Message	3
Milkweed Research	4
Tree Skirt Mosses	5
Native Bees in Kansas	6
Roundhead Lespedeza	9
Calendar of Events	10
Membership News	11
Kanopolis State Park & Trails	12
Book Review	14
In Remembrance	15

KNPS 2023 WILDFLOWER OF THE YEAR

Purple Prairie Clover — *Dalea purpurea*

— BRAD GUHR

Purple prairie clover (*Dalea purpurea*) is the Kansas Native Plant Society 2023 Kansas Wildflower of the Year (WOY). Found throughout Kansas, this erect perennial from the bean family (Fabaceae) grows with multiple simple or branched stems in height of one to three feet tall. Its preferred habitat is medium to well-drained, full-sun, dry upland prairie. Extreme drought tolerance is thanks to a deep taproot. The newer genus name (replacing *Petalostemon*) honors 17-18th century English botanist, Samuel Dale.

The dense thimble-like clusters of tiny flowers help purple prairie clover stand out with a splash of color amidst emerging prairie grasses in June and early July. The one-fourth inch purple flower has five petals and five yellow anthers. Each less than one-eighth inch pod or seed capsule contains a single yellowish-green or brown seed. Delicate leaves are alternate branching and pinnately compound with three to five narrow, linear leaflets.

This non-aggressive, nitrogen-fixing legume is a popular choice for any prairie seed mix or sunny flowerbed. It is common to see various



— CONTINUED ON PAGE 2

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

KNPS BOARD OF DIRECTORS

Anthony Zukoff <i>President</i>	Holcomb, KS
Vacant <i>Vice President</i>	
Earl Allen <i>Treasurer</i>	Manhattan, KS
Krista Dahlinger <i>Secretary & Past President</i>	Mulvane, KS
Shirley Braunlich	Lawrence, KS
Nadine Champlin	Sabetha, KS
Craig Freeman	Lawrence, KS
Brad Guhr	Newton, KS
Lorna Habegger Harder	Hesston, KS
Mike Haddock	Manhattan, KS
Michael Heffron	Eureka, KS
Karen Hummel	Manhattan, KS
Brian L. Martin	Hesston, KS
Pamela Paulsen	Hutchinson, KS
Patti Ragsdale	Tonganoxie, KS
Cynthia Rhodes	Whitewater, KS
Dee Scherich	McPherson, KS
Phyllis Scherich	McPherson, KS
Paul Showalter	Shawnee, KS
Pam Tennison-Rindt	Dover, KS

KNPS NEWSLETTER STAFF

Cynthia Rhodes <i>Copy & Assignment Editor</i>	cynrhodes@gmail.com
Brian L. Martin <i>Design & Layout Editor</i>	
Phyllis Scherich <i>Proofreader</i>	

KANSAS NATIVE PLANT SOCIETY

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

LEARN MORE ABOUT KNPS

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



MICHAEL HADDOCK PHOTOS



Purple Prairie Clover

— CONTINUED FROM PAGE 1

types of bees and other pollinators gathering nectar from the flowers of purple prairie clover. The vegetation is larval food for southern dogface and Reakirt’s blue butterflies.

The drawings are by Lorna Harder and the photographs are by Michael Haddock. To see more *Dalea purpurea* photos by Michael Haddock and a detailed species description, visit kswildflower.org.



Seed and seed capsule (not actual size)

President’s Message

— ANTHONY ZUKOFF

Winter is a time of year when my mind is moving in two directions. I am reflecting upon the past season’s exploration of the wonderful array of landscapes Kansas has to offer. At the same time, I am already daydreaming about the arrival of spring and the multitude of blooms that may come along with it. Let me tell you what I have in mind.

First the reflections: I started off the 2022 year of botanizing with fellow native plant enthusiasts at Little Jerusalem Badlands State Park in Logan County. I have lived in western Kansas for ten years and every spring has been different; May of last year kept up that tradition. On an unseasonably cold and drizzly morning, native plant lovers from all over the state explored short grass prairie flora in the Chalk Badlands. The previous winter’s dry conditions did not afford a showy array of blooms as in seasons past; however, there was plenty to see. In fact, the local flora was observed and appreciated more than one would expect. We found ourselves often crouched over a dwarfed version of a species admiring its tenacity to bloom at ground level during such harsh times. Grasses, standing and dried over winter, were the subject of scrutiny and the group even found themselves admiring jelly-like colonies of Nostoc, a photosynthetic cyanobacteria, covering barren areas amongst the buffalo grass prairie.

Later that season, I found myself the farthest away from the shortgrass prairie of western Kansas I could be. In Miami County, I explored the Osage Cuestas during the annual KNPS Mini-AWW early summer gathering. Remnant prairie, woodlands, and even an amazing butterfly garden were on the itinerary for members that attended. The intense humidity of far eastern Kansas certainly gave me an appreciation for the dry western Kansas wind.

Finally, the season wrapped up at the 44th Annual Wildflower Weekend with fellow native plant enthusiasts to explore native plants in the Flint Hills. The Flint Hills National Wildlife Refuge, Emporia State University’s Ross Natural History Reservation, and the Tallgrass Prairie National Preserve provided attendees with a robust glimpse of this unique region of Kansas. I find it amazing that we can experience such a diversity of flora and landscapes in just one state.

And now to daydream a little: the KNPS board members will gather at the Dyck Arboretum in Hesston in mid-January to begin planning this year’s Mini-AWW and AWW outings and to work on other ongoing and new projects. Hopefully at least one botanizing event will be held in the western part of the state. If you find yourself



ANTHONY ZUKOFF PHOTOS



ABOVE, TOP TO BOTTOM KNPS members at Flint Hills National Wildlife Refuge; Blue sage at Tallgrass Prairie National Preserve.

wishing you could assist in the planning of these activities or other KNPS projects, please contact one of the board members listed in this newsletter, and let us know you want to become more involved.

As we progress through the year 2023, I encourage you to get out and explore the wonderful natural spaces Kansas has to offer. I am looking forward to my continued exploration of these native landscapes, and I hope that you will join me and other KNPS members. Happy New Year and I hope to see you out on the prairie!

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.



ABOVE, LEFT TO RIGHT Common milkweed (*Asclepias syriaca*);
Common milkweed seed; MAREN Milkweed Community Map

MAREN: Milkweed Adaptation Research and Education Network

— LORNA HABEGGER-HARDER

Last March, Brad Guhr and I received an intriguing email from the Milkweed Adaptation Research and Education Network (MAREN), inviting formal and informal science educators to attend a free summer 2022 workshop about milkweed. It fit our schedules, it piqued our curiosity, and so we registered and were accepted. Attending online, we were introduced to the research curriculum and to exciting opportunities for citizen science available through MAREN.

About MAREN. Based out of St. Olaf College in Minnesota, MAREN began in 2015 when Professor Emily Mohl joined the Ecological Research as Education Network and began collecting seeds for what would become the local adaptation project. Since then, the MAREN network has grown to include schools, colleges, and universities across the Midwest and eastern U.S. It is a collaborative project that aims to understand the impact of restoration practices for common milkweed. Citizens and students, grades 6-16, are offered structured research opportunities to contribute to scientific investigation — asking questions, making observations, collecting and analyzing data, and looking for patterns.

About Milkweed. With the spread of agriculture, common milkweed is often viewed as a weed; and with declining Monarch butterfly and their milkweed caterpillar food source, many citizens are planting milkweed. However, when people plant milkweed in their gardens to restore ecosystems, there are concerns about seed sources. Will interactions with pollinators and other native insects including the Monarch butterfly, shift depending on seed source? MAREN's collaborative research focuses on two considerations:

1. **Phenology** is the timing of life events, based on both genetic traits and environmental cues. MAREN's Phenology Investigations are working to understand how the timing of milkweed development and interactions with insects vary across time and space. It is hoped that what is learned will help in decision-making both about milkweed population restorations, and about restoration of degraded milkweed communities. The Phenology Project is also important due to the effects of climate change on milkweed life events.

2. The **Local Adaptation Experiment** is studying whether milkweeds are matched to the environments they come from, and whether they flourish when moved to a new environment. Because more and more milkweed is being planted, it becomes increasingly important to understand the implications of moving milkweeds to new places.

About Curriculum. MAREN has developed curriculum to help students understand the concepts and practices relevant to the research. Curriculum resources are adaptable for students in grades 6-16. They highlight the concepts of evolution and local adaptation, the importance of phenology for adaptation and species interactions, connections between conservation and evolution, and the ways scientists engage in evidence-driven debate.

The MAREN website (<https://pages.stolaf.edu/milkweed/>) contains training videos, an Instructor's Manual for the phenology project, lesson plans mapped to core standards; and a library with contributions from the collaborator network — publications and presentations, opinions, lesson plans, creative contributions, field media and student work. Data submitted from the collaborative network is added to MAREN's growing data base.

About KNPS Involvement. There are currently no registered sites in Kansas even though our state lies within the Monarch migratory "highway." Dyck Arboretum has submitted a pilot research implementation plan for a yet-to-be-determined learner cohort. KNPS members are also invited to get involved. Go to the website, register, learn about the project, and you are set to collect and submit data. Registered participants are also invited to contribute local common milkweed seed (*Asclepias syriaca*) to the phenology project.

MAREN provides yet one more way for KNPS members, our Plant-a-Prairie classroom teachers, our formal and informal science educators, and our interested citizenry to participate in meaningful study that enhances conservation efforts and that serves the prairie community of plants, animals, and people!

Tree Skirt Mosses

— BRAD WILLIAMSON

On a rainy day three winters ago, I went looking for the winter leaves of the putty root orchid in the woods in southern Douglas County. No orchids were found but mosses covering the downed oak logs caught my attention. The more it rained the more the moss stood out on the winter landscape. The rain began to act like it was an all day affair, so I started back to the truck. Retracing my steps, I passed a medium sized oak tree a second time, but now it had an amazing mat of bright green moss that I had not seen before. Where did that come from? Finally, it dawned on me. I was looking at a hydrated moss as opposed to the dehydrated moss that I had passed earlier.

The moss was growing on the north side of the vertical trunk from ground level to about three to four feet. This mat practically shimmered in the half-light of a rainy, winter day. Not only that, but the mat was almost two inches thick. I stood in the rain with my jaw agape trying to figure out how I had ever missed this moss before.

There are several Kansas mosses that you will find growing in the "dog zone" at the base of woodland trees, but two stand out. The one that caught my eye on that rainy day was *Anomodon minor*. It is the more common moss and widespread in the eastern half of Kansas woodlands. *A. minor* is mostly found on the base of trees. These mosses have a pleurocarp growth form (branching stems) and tend to form carpet-like mats. One of the common names is Tree Skirt moss. Note the blunt tips and tongue shaped leaves for this *Anomodon*. Oh, and despite the name suggesting that this is the smallest *Anomodon* in Kansas, it is actually the largest.

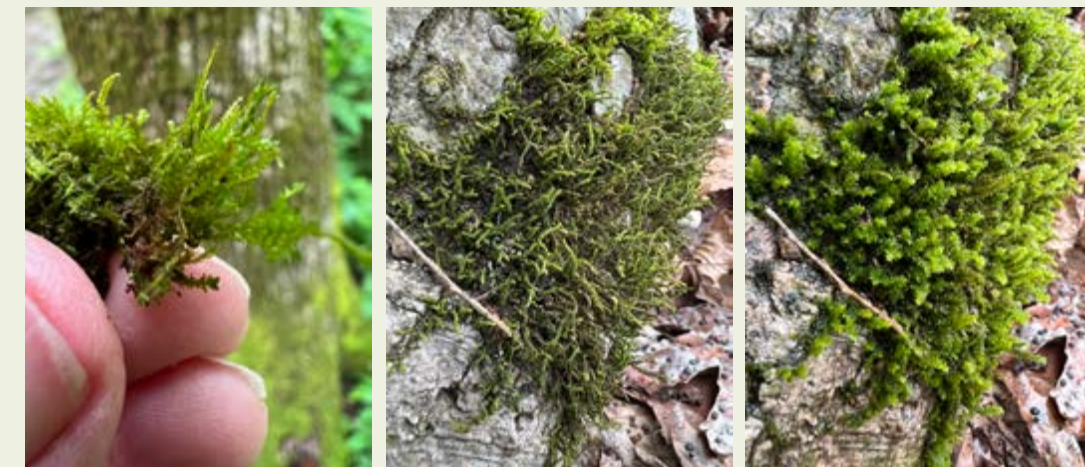
The other fairly common moss in this group is *Pseudoanomodon attenuatus* (formerly known as *Anomodon attenuatus*). Its range is the eastern quarter of Kansas and it tends to be more common on steep soil banks and rock faces than on trees. When dry, *Pseudoanomodon* can have two types of distinctive stems: rat tails and club tails. You can see both in the adjacent photo. When hydrated the name "attenuatus" becomes clear in that the leaves along the stem get smaller in size as you get near the tip of the stem.



ABOVE, LEFT TO RIGHT Fully hydrated *Anomodon minor* growing in the "dog zone" on an oak; Close up of *A. minor*. Note the tongue-like leaf shape; Dry *Pseudoanomodon attenuatus* growing on a steep bank.

When dry, both mosses shrivel up into a tangled mess, but when hydrated, I find them to be some of our more spectacular mosses. I understand that not everyone wants to walk in the woods during a winter rain looking for bits of green. Is there an alternative? Indeed there is. Simply pick a beautiful, sunny day (not too cold) for your walk and take along a small spray bottle filled with water. When you get to your moss site simply spray the water on likely candidate mosses and usually within ten minutes they will be well on their way to rehydrating. Here's a "before and after" photo of small bunch of *A. minor* growing on a limestone ledge that I sprayed to give you an idea of how well this works.

I hope you can find some tree skirt moss this winter. Concentrate your efforts in woods with a good canopy that tend to maintain higher humidity levels. The bottom of ravines and canyons are great places to look. I do not think I have ever noticed one of these mosses growing in early successional-stage woods like those that cover much of eastern Kansas. But maybe I have not looked hard enough. However, I did find both mosses in ravines near Sedan. If you do find these mosses, please take the time to record their location, take some photos, and report your find to the Kansas Native Plant Facebook page.



FAR LEFT Close-up of hydrated leaves of *P. attenuatus*.

MIDDLE Dried *A. minor* on a rock face.

LEFT *A. minor* ten minutes after spraying with water to hydrate the moss.

Native Bees in Kansas

— LENORA LARSON

First, what makes a bee a bee, and not a wasp or fly? Bees are the only animals on our planet that eat nectar and pollen, process it in their crop and then regurgitate the mixture to feed their babies. Wasps and hornets are not bees because they feed their larvae meat, usually in the form of caterpillars. Fly larvae are also carnivorous.

DIFFERENTIATING HONEYBEES AND NATIVE BEES

Honeybees are a domesticated animal, no more at risk of extinction than other domesticated animals such as cattle, sheep, and horses. As Scott Black, executive director of Xerces Society for Invertebrate Conservation, says, “Keeping honeybees to ‘save the bees’ is like keeping chickens to ‘save the birds’.” However, honeybees are unique. Of the 20,000 species of bees, only eight species make honey! They are native to Africa and Europe, none to the new world.

Honeybees came to America with the first European settlers, beginning in 1622. Highly invasive, by 1678, feral honeybees had spread to all the New England states and then easily beat European settlers to the Pacific Ocean. This is not to denigrate honeybees, which contribute valuable honey and wax to our grocery shelves. In the 1930’s, large-scale farmers and orchardists began shipping honeybee hives around the United States to pollinate crops, a service estimated to be worth over \$15 billion annually. Sadly, this practice is harmful to honeybees as it increases the risks associated with pesticides, parasites, and diseases. These same issues also affect our native bees, which do not have the protection of domestication and human good will. They are in significant decline for the usual reasons: loss of habitat, pesticides, and climate change.

Honeybees and native bees have much in common with furry three-part bodies, i.e., a head, Thorax, and abdomen. Plus they have six legs, four wings, and noticeable antennae. Both eat nectar and pollen and are flower-faithful, making them superb pollinators compared to other insects. Female bees feed and care for the larvae. Adult bees are active for only six weeks, except for the queens of social bees.

How do they differ? Only honeybees make wax cells to store the regurgitated mixture of pollen and nectar. After the liquid ages into honey, worker bees use it to feed the queen and her larvae. The wax cells form a large structure, the hive, for communal living. Each



LENORA LARSON PHOTOS



TOP Honeybee
ABOVE Native Cuckoo Bee

worker bee is a female and lives about six weeks. Initially she cares for the larvae, and then graduates to forager until she dies. The queen constantly lays eggs to generate new workers. Unlike native solitary bees, the queen and her workers survive the winter as active adults enjoying the warmth of the hive and eating stored honey.

It is easy to differentiate honeybees from other insects because they are fifteen millimeters long and always tan with dark striped abdomens. In contrast, native bees are highly variable in color and size. They may be tan, black, orange, or green and striped or solid-

colored. Adults range in size from one inch to smaller than a grain of rice. Honeybees have a specialized pollen basket on their hind legs and can carry thirty-five percent of their body weight. Most native bees lack this specialized structure but collect pollen on their hairy bellies or legs as they crawl about the flower. Some species have specialized combs on their forelegs to gather the pollen into a ball once they reach their nest.

Native bees do not live in a hive, which is why they have not been domesticated. Except for bumblebees, each bee digs a solitary home with its mandibles. Seventy percent are underground burrows and thirty percent are above ground in wood or hollow herbaceous stems. Except for bumblebees, each female lays her own eggs and cares for only her own larvae. They overwinter as eggs, larvae, or pupae. Each species emerges as an adult at a specific time, determined by temperature. They live six weeks: mating, laying eggs, and placing provisions of bee bread in the burrows. Except for carpenter bees and Honeybee bumblebee queens, all adult native bees die before winter. Overwintering occurs as dormant eggs, larvae, or pupae depending on the species, so there is no need for food stores like honey.

POLLINATION AND FLOWER CHOICE

Honeybees are generalist pollinators, visiting many species of flowering plants. In contrast, native bees often specialize and

therefore are more efficient pollinators for a particular plant. For instance, native mason bees are active in early spring when members of the rose family like apple and cherry trees are blooming. It takes about 250 mason bees to pollinate one acre of apple trees, while ten thousand honeybees are needed to accomplish the same task. About thirty percent of our Kansas native bees are host plant specific, that is, they can only use the nectar and pollen from one genus or species of plant. For example, the blue sage bee can only eat nectar and pollen from blue sage, *Salvia azurea*. Should this plant become extinct, the blue sage bee also dies. We still do not know what makes a flower attractive to its bee species. A combination of nectar accessibility and sugar content, coupled with the protein to fat ratio of the pollen are likely triggers. In honeybee trials, some native cultivars outperformed their original plant species, which is not surprising since evolution continues to refine bee-plant relationships. Because native bees are not being widely studied there is not yet enough data to know if native bees must have the straight species or prefer native plant cultivars.

HOW WE CAN HELP NATIVE BEE POPULATIONS?

Plant Kansas Native Plants. Kansas is home to about 2000 species of native plants. Except for grasses and sedges, most blooming plants can be useful to pollinators. Plan to have plants blooming from late February until the hard freeze around

EXAMPLES OF NATIVE BEES

Most people are oblivious to the existence of native bees except for bumble bees and carpenter bees. They are astonished to learn that there are over 4,500 species of native bees in the United States, with over 400 species in Kansas. Here are a few of our charming native bees.



Carpenter bees are the largest native bee at over one inch long. They have a yellow fuzzy thorax and shiny black abdomen. The female tunnels in trees, soft wood, or abandoned beetle larvae tunnels to make her nest. She is easily deterred by using only treated wood for construction. Carpenter bees have two broods each year and spend the winter as adults in abandoned tunnels with stored pollen for sustenance. The aggressively territorial males will fly up and confront you face to face, but it is all a bluff since they do not have a stinger.



Leafcutter bees cut circles from leaves and build tubes with stacked leaves between each egg with its supply of bee bread. They spend the winter as larva in their leafy tubes and do not emerge until temperatures are consistently above 85 degrees in late summer. (Photo by Mickey Louis)



Bumblebees are the second largest native bee at about three-fourths inch, but the freshly emerged “super queens” of spring can be up to one inch with a brilliant yellow thorax and furry black abdomen. Bumblebees are our ONLY native social bee, which means that they live as a colony with a queen that lays all the eggs. Her daughters are the workers that collect nectar and pollen and care for the larvae. Only the new queen survives the winter in her chosen home, usually an abandoned mouse burrow. They do not make honey but will sting to defend the nest.

— CONTINUED ON PAGE 8

The following chart compares honeybees and Kansas native bees.

Attribute	Honey Bees	Kansas Native Bees
# of Species in KS	1	At least 400
Native Home	Europe	North & South America
Feed Larva	Yes	Yes
Make Honey?	Yes	No
Social	Yes	No, except bumblebees
Queen?	Yes	No, except bumblebees
Domesticated	Yes	No
Sting?	Yes	No (unless repeatably provoked)
Home	Create wax cells	Dig burrows, 70% in ground, 30% in stems or wood
Size	15mm long	Varies from 4mm to 25mm (1 inch)

Native Bees in Kansas

— CONTINUED FROM PAGE 7



Two-spotted Longhorn bees are ground-dwellers with long antennae. They spend the winter as dormant larvae, then pupate and emerge to forage during the summer months. They are particularly fond of sunflowers. Squash bees are also longhorns but can only use flowers in the Cucurbitae family.



Digger (AKA Miner) bees dig extensive underground burrows to lay their eggs. Even though there may be hundreds of burrows together, they are solitary bees with each female digging her own burrow and taking care of only her own offspring. Most species emerge in spring and forage on woodland flowers.



Thirty percent of native bees belong to the Halictide or sweat bee family. Most species are smaller than a grain of rice. Their color varies from brown, black, a beautiful metallic green, or blue. The salt in human sweat attracts them so use herbal lotions to repel. Their nests look like ant hills since they are dug on the surface of bare soil. They are very important pollinators of our crops.

LENORA LARSON PHOTOS

Thanksgiving. A diverse garden with many annual and perennial flowering plants is more bee-friendly than a limited perennial garden.

No Insecticides. The chief predators of insects are other insects. Insecticides do far more harm than good by knocking out the beneficial insects, which are your chief ally in keeping your garden beautiful and productive. The term “organic” refers to the origin of the product, not to its safety. Organic insecticides kill insects just as efficiently as their synthetic counterparts. Pest problems rarely occur in a well-planned garden with diverse plantings. If an outbreak arises, most healthy plants will recover without human intervention.

Provide Nesting Sites. Most of our native bees nest underground so avoid using weed fabric and leave some soil open to the sun to create nesting locations. Some native bees are attracted to rotting logs and dead trees. Instead of removing all garden debris in the fall, at least leave the standing stems that provide overwintering shelter for native bees.

Buy or Make Bee Houses and Hotels. Just as birdhouses are helpful for songbirds, bee houses provide valuable year- round nesting sites. Multichambered bee hotels can be quite attractive with their compartments providing a variety of nesting materials, including the tubes favored by mason bees. For bees that nest in wood, bee houses can be made from untreated lumber or logs by drilling various size holes ranging from an eighth to a quarter-inch in diameter and at least three inches deep. Hang on a fence in a sunny location and soon native bees will lay eggs in the holes. You will know that your bee house is being used when the holes are blocked with a mud and grass mixture.

GETTING TO KNOW NATIVE BEES

When told that there are over 400 species of native bees in Kansas, people logically ask, “Where are they? Why isn’t my garden overrun with bees?” For forty-six weeks of the year, you will not see each native bee because it is hidden in its nest as an egg, larva, or pupa. Since the timing of the adult’s emergence is triggered by temperature and other environmental cues, they are spread out by species between March to October. For example, a population of digger bees *Anthophora abrupta* has lived in burrows underneath my porch for over thirty years. From mid-July until the last week of May, forty-six weeks, there is no sign of life. Suddenly the last week of May, a quarter of a million bees emerge simultaneously from the burrows. After mating, the females lay eggs and for a month they assiduously gather nectar and pollen to feed their larvae. Then the larvae pupate and all the adults die during the first week of July. The bees will not be seen again until the new generation emerges in May the next year. Sadly, climate change is disrupting the delicate timing of emergence and flower bloom.

Observation is the best way to start recognizing native bees. For instance, the many small yellow and black bees are NOT baby bumblebees! Remember, bee babies are larvae and when a bee emerges from its pupa it is fully grown. Those ant-size flying creatures on your flowers are often bees. But it is tricky because many flies and moths mimic bees as a defense strategy. Through observation, you will begin to differentiate the pollinators and realize how many there are. A new reference book, *Backyard Bees of North America*, available on Amazon, could be extremely helpful. Note: the next KNPS Newsletter will feature another fascinating native pollinator, the Syrphid Fly.

FEATURED NATIVE PLANT

Roundhead Lespedeza | (*Lespedeza capitata*)

— LORNA HABEGGER-HARDER

The prairie waved in the wind as I walked on a recent cloudy, winter day. Despite the gray sky, the prairie grasses seemed to shine with an inner light, reflecting back their red, bronze and golden colors on one of the shortest days of the year. The remains of the last summer’s forbs were still present. Here and there, like punctuation points, I found the cinnamon brown seed heads of Roundhead Lespedeza. Over the years, I’ve collected seed from those easy-to-spot seed heads; and nearly every winter, stems of Roundhead Lespedeza find their way into dried bundles in my home, paying homage to the seasonal cycles of one of the prairie’s subtler native plants.

Roundhead Lespedeza (roundhead bush clover, bushclover, rabbit foot) is a perennial with stiff, erect stems from 0.5-1.5 m tall. Usually stems are unbranched except for short branches at the top where inflorescences are found. Leaves are trifoliately compound, alternate, and crowded along the stem. Both stems and leaves are densely covered with hairs, giving the plant a silvery gray-green sheen and making it soft to the touch.

Roundhead Lespedeza has a single tap root extending nearly 3 m down with branching roots nearer the soil surface. Rhizobia, nitrogen-fixing bacteria, also form nodules on the roots. This species is quite adaptable and drought tolerant. It is native from the mid- and tallgrass prairies in the Great Plains and Midwest, to woodland glades in the southern and eastern U.S. It grows in a wide variety of soils, from gravel to loam to clay to sand, preferring dry to medium moisture and full to partial sun.

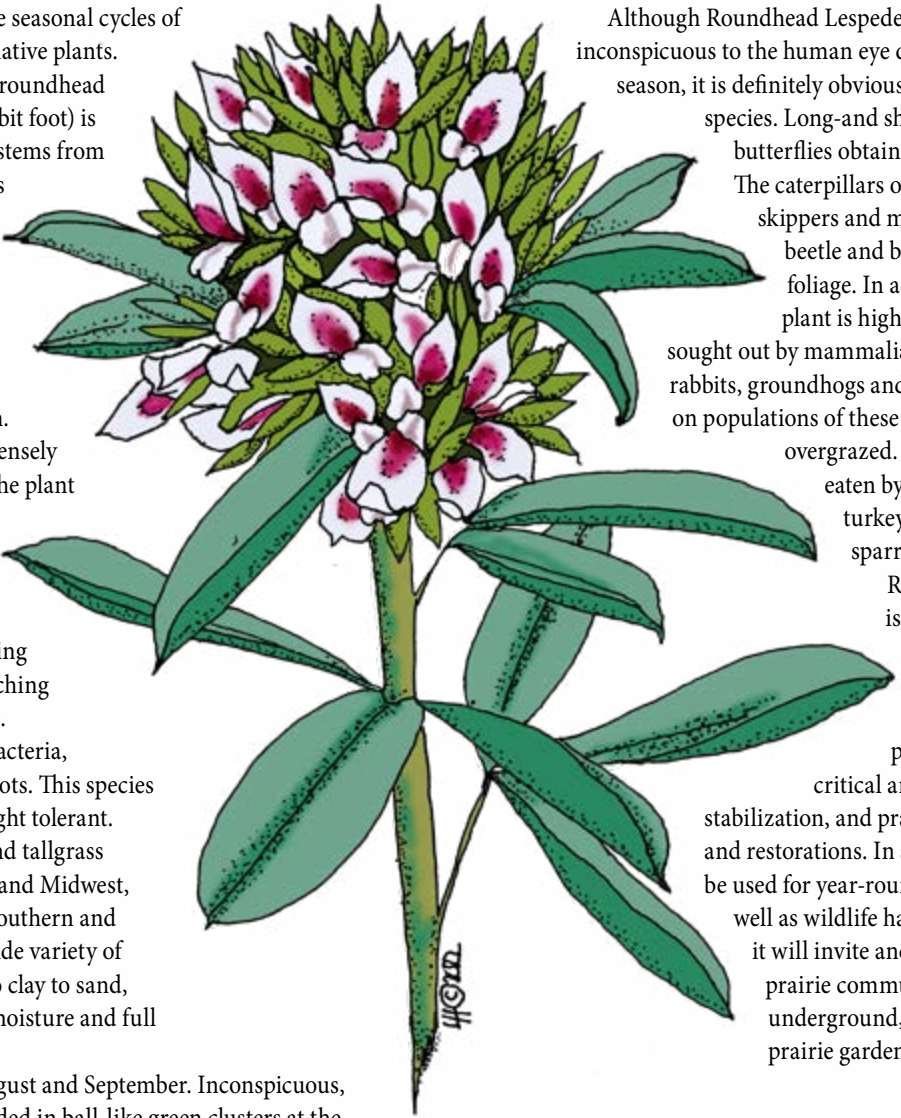
Flowering occurs in August and September. Inconspicuous, clover-like flowers are crowded in ball-like green clusters at the tips of the stems. Flower petals are white with a purple spot on the banner. Each flower is surrounded by the narrow pointed lobes of a calyx. Calyces persist as part of seed heads after the leaves have dropped. Seed pods are indehiscent (the pod does not split open to release seed) and one seeded.

Roundhead Lespedeza is readily propagated from seed. Seed heads can be collected in early to mid-fall before pods

are released, and allowed to dry. Harvest the seed by rolling or rubbing seed heads together to release seed from the pods. Seeds are approximately 4-7 mm in length. Germination requires gentle scarification with sandpaper followed by approximately 10 days of cold stratification. Viable seed germinates within 3-10 days following treatment. Treated seed can be sown in the field in spring, or in pots in the greenhouse for later transplantation into the garden. Rhizobial inoculants are also available to enhance establishment of seedlings.

Although Roundhead Lespedeza is somewhat inconspicuous to the human eye during the growing season, it is definitely obvious to a host of animal species. Long-and short-tongued bees and butterflies obtain pollen and nectar. The caterpillars of several species of skippers and moths, and some adult beetle and bug species feed on the foliage. In addition, the palatable plant is high in protein and sought out by mammalian herbivores — deer, rabbits, groundhogs and cattle. Depending on populations of these herbivores, it can be overgrazed. In winter, seeds are eaten by mourning doves, wild turkeys, quail, and grassland sparrows.

Roundhead Lespedeza is recommended in a number of planting applications: road right-of-ways, parks, recreation areas, critical areas requiring soil stabilization, and prairie reconstructions and restorations. In a native garden it can be used for year-round visual interest as well as wildlife habitat. Over the years, it will invite and serve a diverse prairie community, above-ground, underground, and all around your prairie garden!



References:
Illinois Wildflowers. https://www.illinoiswildflowers.info/prairie/plantx/rh_bushcloverx.htm
Kansas Wildflower. <https://www.kswildflower.org/>
Lady Bird Johnson Wildflower Center. https://www.wildflower.org/gallery/result.php?id_image=23012
Prairie Moon Nursery. <https://www.prairienursery.com/round-head-bush-clover-lespedeza-capitata.html>
USDA/NRCS, https://plants.usda.gov/DocumentLibrary/factsheet/pdf/fs_lcca8.pdf

— LORNA HABEGGER-HARDER ILLUSTRATION

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.

JANUARY | 14

KNPS WINTER BOARD MEETING, Dyck Arboretum, Hesston. Weather alternate date is January 21. **For more information, contact Brad Guhr** brad.guhr@hesston.edu, 620-327-8127

JANUARY | 23

NATIVE PLANTS IN THE CITY: FIVE IDEAS, presentation by Katie Kingery-Page, hosted by Jayhawk Audubon Society, 7 pm, Carnegie Building, 9th and Vermont, Lawrence. Native plant landscapes in urban settings provide many things such as wildlife forage and habitat. Drawing from her projects, the Meadow and Grassland Interview, landscape architect Katie Kingery-Page shares big ideas to inspire civic imagination. **Contact for info:** rboydbird69@gmail.com or 785-424-0595

JANUARY | 28

SEED CLEANING PARTY with Grassland Heritage Foundation, 2-4 pm, Armitage Education Center, KU Field Station, 350 Wild Horse Rd, Lawrence. The seed cleaned at this event will benefit the Prairie Park Prairie Restoration Project and restoration projects at the KU Field Station. Even though the event will be indoors, we may have to reschedule due to adverse road conditions. RSVP at grasslandheritage.org/prairiepark We will contact you at the email you provide in case we need to reschedule the event. **For more info: Kaitlyn at** grasslandheritage@gmail.com or Sue 913-856-4784

JANUARY | 31

Dyck Arboretum Winter Lecture Series: **“ATTRACTING BEES & BENEFICIAL INSECTS WITH NATIVE PLANTS,”** by Heather Holm, 7-8:30 pm, via Zoom. **To register:** dyckarboretum.org. **Cost is \$5.00.** **More info:** 620-327-8127

FEBRUARY | 9

Native Plant School Winter class: **“THE WONDERFUL WORLD OF GRASSES”** with Scott Vogt, 7-8:30 pm, via Zoom. **To register:** dyckarboretum.org. **Cost is \$5.00.** **More info:** 620-327-8127

FEBRUARY | 18

THE KAW VALLEY SEED FAIR, Douglas County Fairgrounds, 8:30 am to 2:30 pm. Bring your saved seeds or packaged seeds to share at our exchange tables. We typically have envelopes available but we sometimes run out. Everyone is welcome, with or without seeds to share. Bring containers, envelopes, or baggies to donate, especially if you do not have seeds to share, it is much appreciated. **Contact Laura Green** 785-550-4757

FEBRUARY | 24

WILD & SCENIC FILM FESTIVAL, Liberty Hall, 644 Massachusetts St., Lawrence, doors open 6:00 PM, show starts 7:00 PM. Tickets to benefit Friends of the KAW and the Kansas Riverkeeper Program. **Info:** kansasriver.org, 785-312-7200, info@kansasriver.org

FEBRUARY | 28

Dyck Arboretum Winter Lecture Series: **“MCPHERSON VALLEY WETLANDS: PAST, PRESENT & FUTURE,”** by Jason Black, 7-8:30 pm, in person. **To register:** dyckarboretum.org. **Cost is \$5.00.** **More info:** 620-327-8127

MARCH | 9

Native Plant School Winter class: **“ANCIENT PLANTS, MODERN DESIGN”** with Katie Schmidt, 7-8:30 pm, via Zoom. **To register:** dyckarboretum.org. **Cost is \$5.00.** **More info:** 620-327-8127

MARCH | 14

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

MARCH | 23

Native Plant School Winter class: **“LIBERATING THE PRAIRIE: A REVIEW OF TREE/SHRUB REMOVAL METHODS”** with Brad Guhr, 7-8:30 pm, via Zoom. **To register:** dyckarboretum.org. **Cost is \$5.00.** **More info:** 620-327-8127

MARCH | 28

Dyck Arboretum Winter Lecture Series: **“HOME ON THE RANGE: BREEDING BIOLOGY OF PRAIRIE CHICKENS,”** by Dr. Jackie Augustine, 7-8:30 pm, in person. **To register:** dyckarboretum.org. **Cost is \$5.00.** **More info:** 620-327-8127

APRIL

FLORAKANSAS: GREAT PLAINS PLANT BAZAAR at Dyck Arboretum of the Plains, Hesston. This plant sale features hard-to-find native perennials plus classes and tours. **Member’s only sale Thursday; 10% members discount on all days.** Admission charge is by donation. dyckarboretum.org, 620-327-8127

MAY/JUNE

KNPS MINI-AWW MEETING. Come for a day of botanizing. Watch for the date and more information coming soon. **Contact:** email@ksnps.org

AUGUST/SEPTEMBER

KANSAS NATIVE PLANT SOCIETY’S 44TH ANNUAL WILDFLOWER WEEKEND (AWW). Enjoy a full weekend of outings, board meeting, membership meeting, programs, silent auction, photo contest, local dining, and socializing! Come and Join Us! Watch for more details coming soon. **Contact:** email@ksnps.org

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

NEW MEMBERS FROM 9/18/22 TO 1/03/23

Susan Kelly Ambler – Denver, CO	Jo Richards – New Cambria	Stephen Hight – Pittsburg
Iris Evans – Waverly	Sonja Baughman – El Dorado	Natalie Jackson – Overland Park
Kendra Flory – McPherson	Mel Diamoush – Lawrence	Diane Meinke – Overland Park
Vincent & Skip Mancini – Sublette	Barbara Fox – Wichita	
Samantha Reeder – Derby	Catherine Glover – Leavenworth	

MEMBER RETURNING AFTER A HIATUS

Elizabeth Betros – Lenexa	Lidia Gray – Liberal	Connie Mann – Valley Center
Helen Ann Caples – Linn Valley	Paul Stoner – Neodesha	Rick Warshauer – Volcano, HI
Charles Garrett – Eudora		

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.

*****AUTO**ALL FOR AADC 670 *** 4 8 443

I 12/31/2022

CYNTHIA RHODES

6505 NW INDIANOLA RD

WHITEWATER KS 67154-8843



MEMBERSHIP REGIONS





FEATURED NATURAL AREA

Kanopolis State Park and Trails

— CYNTHIA RHODES & BRIAN L. MARTIN

We had been there before, but for some reason, this beautiful Kansas oasis draws us back every year! This year, the day was August 6, which was a sunny, mild to hot day with little breeze to start that turned into a hot, sand-picking-up wind by early afternoon. There were those puffy, white clouds in the sky that skittered over the sun to provide some relief from the heat and glare. In other words, it was a perfect August day for a botanizing walk at Kanopolis Reservoir.

Including more than 15,000 acres of rolling hills, canyons, sandstone bluffs, and riparian habitat, Kanopolis State Park is Kansas' oldest recreation area. The reservoir at normal pool covers 3,000 acres and is located just off of Highway K-141 and 33 miles southwest of Salina. Construction on the dam began in 1940, but was interrupted by World War II and finally completed in 1948. This state park consists of 1,585 acres and is operated by the Kansas Department of Wildlife and Parks. Additionally, the U.S. Army Corps of Engineers operates the two adjoining parks: Venango and Riverside, and maintains the Yankee Run and Bolt Bluff access areas.

Open to hikers, bikers, and horseback riders, Kanopolis offers 28.11 miles of trails (15.04 miles of which are in the Smoky Hill Wildlife Area). The series of trails traverse through varied terrains including prairies with water crossings, canyons with boulders and trees, and a sandstone canyon that will take your breath away. The forty-acre Wildlife Viewing Area has a .6-mile ADA accessible trail circling through a marsh and around two ponds, five photo blinds, a certified monarch way station, and an observation deck, all of which offer prime opportunities for birders, photographers, and outdoor enthusiasts of all ages.

We decided on the Horsethief Area, parking at lot C and setting off along the Buffalo Tracks Trail. Hiking through the rolling, sandy hills, we botanized slowly as we progressed. Even though the area was suffering from the summer's drought, we identified a profuse variety of prairie wildflowers and grasses. Among those in the upland areas included: silktop dalea (*Dalea aurea*), scaly blazing star (*Liatris squarrosa* v. *glabrata*), Texas greeneyes (*Berlandiera betonicifolia*), Hooker's scratch daisy (*Croptilon hookerianum*), four-point evening primrose (*Oenothera rhombipetala*), Nuttall's evolvulus (*Evolvulus nuttallianus*), field snake-cotton (*Froelichia floridana*), purple prairie clover (*Dalea purpurea*), long-bearded hawkweed leaves (*Hieracium longipilum*), wax goldenweed (*Grindelia papposa*), black Sampson echinacea (*Echinacea angustifolia*), and many, many more. On the shaded and moist,

north facing side of the canyon we identified: pitcher's clematis (*Clematis pitcheri*), sensitive fern (*Onoclea sensibilis*), marsh fern (*Thelypteris palustris*), scouring-rush (*Equisetum hyemale*), American germander (*Teucrium canadense*), and blue vervain (*Verbena hastata*). Of course, this location is a prime area to see the various colored blossoms of the butterfly milkweed (*Asclepias tuberosa*).

Feeling daring, we chose the path that wound upward around several large sandstone outcroppings to an observation area at the peak. We could see where we had been, and planned where we would cross the creek and traverse up the other bank and along the Rockin' K Trail. This trail is a prairie stroll where we identified blue wild indigo (*Baptisia australis*), grooved yellow flax (*Linum sulcatum*), Missouri goldenrod (*Solidago missouriensis*), stiff goldenrod (*Solidago rigida*), narrow-leaf bluets (*Hedyotis nigricans*), and pitcher sage (*Salvia azurea*). Among the boulders we observed a couple of colorful lichens which we wished we could identify accurately.

After a lovely couple of hours on the trail and since the day was increasingly hot and windy, we decided to circle back to the parking lot and conclude this memorable hike. Upon leaving the

park area, we drove to Carneiro to consider the past as we cruised by the old buildings that still stand. Of course, the day's last stop was Mushroom Rock State Park to see and walk among the unusual and unique mushroom-shaped rock formations. We did not travel the six miles west to Kanopolis to see the four remaining buildings of Fort Harker, a once-active U.S. Army outpost in the late 1860's, deciding to save this encounter for another Kanopolis visit.

Yes, we will be back to Kanopolis another day; this place has a draw for us. This year we were botanizing during a drought and we were amazed by the profuse variety of wildflowers we saw and identified. Just imagine what this place looks like when there is plenty of rain! Take a daytrip, or stay overnight in a cabin. Bring your horse or gear to hunt and fish; this place has something for everyone. And for the native plant enthusiast, this park certainly is a dream come true in the middle of Kansas!

CLOCKWISE FROM TOP LEFT Texas greeneyes (*Berlandiera betonicifolia*); pitcher's clematis (*Clematis pitcheri*); Hooker's scratch daisy (*Croptilon hookerianum*); long-bearded hawkweed leaves (*Hieracium longipilum*); field snake-cotton (*Froelichia floridana*); A deep sandstone bowl carved from storm runoff; silktop dalea (*Dalea aurea*); scaly blazing star (*Liatris squarrosa* v. *glabrata*); sensitive fern (*Onoclea sensibilis*); A layered sandstone outcropping on the Buffalo Tracks Trail.



BOOK REVIEW

ANIMAL, VEGETABLE, MIRACLE – A Year of Food Life

– KAREN HUMMEL

This book, *ANIMAL, VEGETABLE, MIRACLE – A Year of Food Life*, by Barbara Kingsolver, with input from her husband Stephen Hopp and daughters Camille and Lily, was published in 2007. It documents a year in which the family pledged to live entirely on locally sourced food. I reviewed the Tenth Anniversary Edition which included an Epilogue.

There are two strong themes woven through the twenty chapters. The first thread documents, with great humor and detail, the strategy and work entailed in meeting the family commitment for local food sourcing. The second thread reviews the history of American agriculture from dust bowl and depression years, the switch from tobacco as a cash crop, decisions made by the US government and corporations, and the evolution of the family farm model. I will review it in two parts.

PART 1 of ANIMAL, VEGETABLE, MIRACLE Book Review – A Year of Food Life. (The family perspective)

Barbara Kingsolver and her family had long lived in Tucson, Arizona, spending their summers at a cabin near Meadowview, Virginia where they kept a large and prolific vegetable garden and enjoyed the presence of natural spring water, fertile soil, an expansive growing season, and seasonal rains. They decided to make the move permanent, fixing up the old farm house on the property, and getting serious about providing as much of their own food as possible. And Barbara had a book contract to document it all.

The first year after the move was spent in preparation, fixing up the house, planning the garden and poultry assets, ordering seeds, identifying what was already in place. The Year started in April, 2005 when the asparagus was ready to pick. The ground rule was to eat as normally as possible — delicious, beautiful, nutritious food in season or preserved. The garden planting had started in January, with heirloom seeds in pots on shelves under fluorescent lights. Later they were moved to an unheated greenhouse and transplanted to the garden mid-April.

The author points out that the sequence of produce over a summer follows the life of an annual plant, according to the botanical season. In spring, the seeds take root and send up shoots and leaves (lettuce, chard, kale). Then the male and female flowering parts emerge (cauliflower, cabbage, broccoli). After pollination, the fruits set (peas, squash, cucumbers, green beans, peppers, tomatoes, tree fruit). Then come the hard-shelled fruits with developed seeds (melons, winter squash). Last to harvest are the root crops (potatoes, carrots, beets, onions). There are outliers to this model (radishes,

carrots, some onions and more), but it is a guide.

Livestock. Barbara’s dream was to establish a breeding flock of heirloom turkeys. Six-year-old Lily had left a thriving chicken egg business in Tucson, and was eager to establish a new flock. This they both did.

The year was filled with planting, weeding, harvesting, cheese making, cooking, canning, freezing, drying, Lily’s egg business, supporting the local farmers market, making friendships, and entertaining friends. Stephen took up daily bread baking. You can access an ample sampling of their recipes at <http://animalvegetablemiracle.com/recipes.htm>



PART 2 of ANIMAL, VEGETABLE, MIRACLE Book Review – Evolution of the Family Farm Model (the change in American food production and eating habits)

AMERICAN CONNECTION WITH FOOD

As you read this in January, 2023, you may still be basking in the recollection of recent traditional holiday feasts with family and friends. Now that the holidays are past, your food habits have probably reverted to your usual patterns. Do you have a garden? Do you prepare food “from scratch,” rely on frozen dinners or mixes, eat out, or grab fast food habitually? We have so many options. How did our food production, manufacture, delivery systems change so dramatically within a span of a generation? I urge the reader of this book review to go to the subject book itself and read pages 8 to 56. Some of the information may be new to you, and you may agree or disagree with the authors’ interpretation on the influences at work in the changes, but it is well researched and still timely nearly two decades later.

Briefly, the author relates that we have gone from family “victory gardens” in World War II to a generation that sees the original food source as supermarket shelves, and is surprised to learn that carrots grow in dirt. At the time the book was originally published, the U.S. had lost three hundred farms a week, and the situation has not improved. The family farm is losing out to corporate farming. In parallel, the fast food industry is thriving, and the combination of empty calories and “supersizing” has resulted in massive growth in the incidence of obesity and diabetes.

AMERICAN FOOD CULTURE

Barbara laments that other nations have identifiable foods (Italian, Greek, Spanish, Thai, Japanese, various Chinese forms, Mexican, etc.) “It arises out of a place, a soil, a climate, a history, a temperament, a collective sense of belonging.” However, she

contends that Americans lack a food culture to call our own, and she details how we can develop a unique food culture in this section.

How to develop a food culture: 1) Live on the land that feeds you. 2) Be able to think of “food” and “dirt” in the same sentence (vegetables growing from the ground rather than sprouting from the supermarket shelf.) 3) Understand the supply chain of your food.

According to the authors, diversified food-producing farms on the outskirts of cities are actually the fastest growing sector of US agriculture. Sourcing food locally, the farm-to-table model, is good for the environment, the local economy, and the health of consumers. An example is Appalachian Harvest, a collective with a full-time marketer, a packing house, and an assembly line of workers preparing certified organic produce to go to customers. Produce not meeting the standards are donated to low income families. Countering this positive food-culture movement, local growers often face competition with California “organic produce” in sales to supermarkets and restaurants.

In the Tenth Anniversary Epilogue, we learn that Stephen Hopp had opened a restaurant in Meadowview, Virginia, serving delicious foods prepared from locally sourced produce and meats. Harvest

Table Farm and Restaurant operated successfully for fifteen years. A recent Google search shows that it closed on September 22, 2022.

The Appalachian Harvest collective still exists, under the label of Appalachian Harvest Sustainable Development. The website description is: “Supporting farmers and tackling hunger. We help family farmers stay on local farms by connecting them to strong markets of different types and sizes by providing the training, tools, technical assistance and resources they need for success.” Stephen Hopp sits on their Board of Directors. The website is <https://www.asdevelop.org/about-us/>

CONCLUSION

I encourage you to consider reading *ANIMAL, VEGETABLE, MIRACLE – A Year of Food Life*. If you like Kingsolver’s writing style, you will not be disappointed. The major characters are generously allowed to present themselves in their contributions to the text. The two distinct themes are artfully interwoven for impact and literary contrast, so the reader is alternately entertained and challenged. If you do not want to read the book, you might still enjoy the recipes at <http://animalvegetablemiracle.com/recipes.htm>

In Remembrance

Thomas Allen Eddy

Thomas Allen Eddy of Emporia was born to Margaret Womer Eddy and Luther Merton Eddy in Parsons. He was devoted to his wife of fifty-eight years, Ginnie Anne Ryan Eddy and his two daughters, Laura Marie Eddy and Blythe Anne Eddy Dody (Aron), and greatly treasured his grandchildren, Destiny, Cahaya, and Landon Dody. Tom was loved and admired by his siblings: William B. Eddy (Linda) of Kansas City, Missouri; Marcia Price (Palmer) of Salina; Cheryl Figgs (Dennis Domer) of Baldwin City and Phoenix; and Edward Mitchell Eddy (Deborah Ann O’Brien) of Chapel Hill, North Carolina.

Many of Tom’s early years were spent on the family farm in Havensville, Kansas where he graduated from high school, excelling academically and playing several sports. He loved adventuring in the countryside and observing plants and animals and fishing in the beautiful creeks of Pottawatomie County.

Both of Tom’s parents had college degrees and were teachers who strongly believed in advanced education for their five children. He followed in their footsteps, earning a BA from Kansas State University, MS from the University of Arizona, and a PhD from Kansas State University. In 2012, Tom was honored for teaching fifty years at Emporia State University, retiring in 2015.

Tom devoted his life to teaching others how to appreciate and understand the ecology and biodiversity of the Flint Hills. In 2005, he received an Excellence in Conservation and Environmental

Education award from The Kansas Association for Conservation and Environmental Education (KACEE) which recognizes individuals who best exemplify dedication, commitment, and influence in the field of conservation and environmental education. Tom was recognized as the 2021 Friend of the Flint Hills from the Flint Hills Discovery Center. The award honors significant time,

effort, and resources devoted to the conservation of the Flint Hills. Special recognition was afforded to Dr. Eddy at the 2022 KNPS Annual Membership Meeting at the AWW held in August.

Tom volunteered for all Symphony in the Flint Hills events, taking guests on prairie walks and sharing his expertise in a very knowledgeable and approachable way. Tom was known for his willingness to help others with plant identification and prairie appreciation. In retirement, he enjoyed traveling the Santa Fe Trail and studying the history and plant life along the trail.

Tom passed September 23 and was preceded in death by his parents, an infant son, and an infant grandson. He will be greatly missed for his gentle presence, lively stories, love of nature, and deep caring for family. A Celebration of Life was planned

on Saturday, October 15 at the Clover Cliff Ranch pavilion in Chase County and was open to all. Memorial contributions can be made to KACEE at www.kacee.org or the Symphony in the Flint Hills at www.symphonyintheflinthills.org.

Obituary reprinted from The Emporia Gazette.



CYNTHIA RHODES PHOTO

KANSAS NATIVE PLANT SOCIETY

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

Non-Profit Org
U.S. Postage
PAID
Permit No. 867
Newton, KS

ADDRESS SERVICE REQUESTED



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

Member Information

Name _____
Address _____
City/State _____
Zipcode _____
Phone _____
Email _____
County (if KS) _____

Membership Category

☐ Student \$15.00
☐ Individual \$20.00
☐ Family \$30.00
☐ Organization \$35.00
☐ Contributing \$100.00
☐ Lifetime \$500.00

Additional Donation: Legacy Fund \$ _____ Scholarship Fund \$ _____ General Fund \$ _____