

Gaillardia

Oklahoma Native Plant Society

The purpose of the Oklahoma Native Plant Society is to encourage the study, protection, propagation, appreciation and use of Oklahoma's native plants.

Volume 33, Number 1

Spring 2018

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ONPS website: <u>www.oknativeplants.org</u> oknativeplants@yahoo.com Gaillardia email: thegaillardia@gmail.com

COPY AND ART DEADLINE FOR NEXT ISSUE IS May 5th, 2018

Wonder of Wildflowers Weekend will be held April 28th and 29th at the Pontotoc Ridge and Oka Yanahli Preserves which are located south of Ada in Pontotoc County. These preserves, owned by the Oklahoma Nature Conservancy, are home to an incredible number of wildflower and grass species, as well as the rare Seaside Alder. Oka Yanahli also boasts a section of the Blue River.

More information will be posted on Facebook, the ONPS website and mailed to ONPS members as soon as plans are finalized.

Upcoming Events/Activities

(check the ONPS website for more details)

Fabulous Wildflower Fridays, at 5:30 the third Friday of each month at Panera Bread at 5601 E 41st Street, Tulsa

March 5 NE Chapter at the TGC 6:30 snacks, 7:00 meeting "Welcome to a Virtual Bioblitz", Lynn Michael speaker

March 7, April 7, 14 and 21 NE Chapter Field Trip for virtual Bioblitz, details the via Facebook and ONPS website

March 1 and April 5 Central Chapter meeting 6:30 OSU/OKC

May 6 Central Chapter 4:00 Potluck and Pumpkin Rolling, Prairie Wind Nursery located east of Norman

May 7 NE Chapter, Wildflowers of Gunnison Valley CO, Sue Amstutz speaker



Sally Webb 1st Place Winner, Flora and Fauna

WELCOME TO THESE NEW MEMBERS

Maria & Sarah Brittle	Sand Springs
Forest Chapman	OKC
Megan Huntley	Edmond
Judy Stoyanoski	Midwest City
Nadine Varner	Midwest City
DONATIONS	

Robin Hutchings (General Fund)

Photo Contest

Photo winners were announced at the recent Indoor Outing and some of the first place photos are found in this issue of the Gaillardia. The remaining first place winners will be in the summer edition of the Gaillardia. At the recent ONPS Board meeting the decision was made to ask that all photos be submitted via Facebook. You will have the entire growing season to capture all of these that you can and upload them to the appropriate albums. Winning photos will be chosen in December and the photographers will receive an annual membership to the Oklahoma Native Plant Society. Categories for the coming year will be Paintbrushes (*Castilleja* spp.) and Lichens.

Save the Date

Our ONPS trip to the Lady Bird Johnson Wildflower Center and Selah in Austin is being planned for October 25-28 of this year.

If you've never visited you will not be disappointed!

President's Paragraph

Dear ONPS members:

It is an honor and privilege to serve as president of ONPS. I will do my best, however, I will need a lot of help. I am a botanist and also enjoy horticulture. My passion is ferns, oak-hickory forests, and creating Oklahoma floras. As president my focus will be on the following:

- 1. Creating Oklahoma floras and publishing the checklists in the "Plant Record"
- 2. Making plant collections and donating them to herbariums in our state.

I would like to have a meeting for all who are interested in floras and plant collections. We will meet at McLoud High School in March. If you are not an expert on plant identification, no worries. We can figure this out together. We will train you.

These are some of my passions. The Oklahoma Native Plant Society is not about me, it is about *us*. I will do my best to be a good listener and promote your ideas as well. Please email me and let me know your thoughts. If you think you might be able to attend the March meeting, email me and we will set up a date.

God Bless

Bruce A. Smith cmwootoni1@gmail.com

Indoor Outing Report "Tools of the Trade"

More than 100 people attended the Indoor Outing at the O.U. campus in Norman on February 3rd.

Speakers included Al Sutherland Mesonet for Gardeners, Jona Tucker Oklahoma Nature Conservancy, Steven Bond Ethnobotany of the Chickasaws, and Rebecca Sherry Ecological Restoration.

After lunch there were rotating tours and workshops. Abigail Moore, curator of the Bebb Herbarium gave a tour of the herbarium, walking attendees through the steps of collecting, preserving and cataloging plant samples from across the state. Rahmona Thompson, ECU Emerita Professor gave hands-on lessons on the use of dissecting microscopes. Lynn Nichols, Manager of the Biology Greenhouse gave a tour of the nearby greenhouse and showed off several prized specimen plants.

Vendors and those with displays included the Oklahoma Mesonet, Beth Landon of the OCU Biology Department and editor of the EnvironMentor newsletter, Priscilla Crawford of the OU Biosurvey and Oklahoma Natural Areas Registry, Utopia Gardens, Prairie Wind Nursery and Wild Things Nursery.

Japanese Honeysuckle (*Lonicera japonica*)

What's Not to Love?

Amy Morris

Japanese honeysuckle, *Lonicera japonica*, triggers intense memories. As a child I was bewitched by its heady summer fragrance, and loved to suck the sweet nectar from the blossom. After moving to Oklahoma, I planted this enchanting vine beneath my bedroom window. I loved the delicate, orchid-like tubular flowers, with its fused two-lipped corolla. It was a plant for the senses. Japanese honeysuckle has long been favored by gardeners, landscapers and wildlife managers. It grows quickly, stabilizes banks and controls erosion, provides winter forage for deer, and attracts pollinators and birds.

What is not to love about Japanese Honeysuckle?

Japanese honeysuckle is in a large genus with over 180 species in the family Caprifoliaceae. This East Asian species was introduced to the United States in the early 1800's and quickly began to displace native species. It is one of Oklahoma's top 12 Invasive Plant Species.

It spreads by underground rhizomes and above ground runners. The shiny, globular fruits turn black as they ripen. Each fruit contains 2-3 seeds. Birds feeding on the seeds distribute them far and wide, along with a dose of fertilizer.

The evergreen to semi-evergreen vines can trail or climb up to 80 feet into tree canopies, forming dense mats that cast shade below. Vines may girdle small trees, and choke forest floors and shrub layers, outcompeting native species for resources and diminishing biodiversity.

What is not to love about Japanese honeysuckle? Plenty! There are many methods currently being tried to combat Japanese Honeysuckle, including herbicides and fire. However, here are some things we can all do and share with others.

Encourage our local nurseries, communities and friends to try native alternatives to Japanese honeysuckle. These include requesting and planting trumpet creeper (*Campsis radicans*), trumpet honeysuckle (*Lonicera sempervirens*), Virginia creeper (*Parthenocissus quinquefolia*) and passion flower (*Passiflora incarnata*).

Musk Thistle Carduus nutans

Marilyn Stewart

This plant thug came from Asia and Europe in the early 1900's and is considered a noxious weed not only in the U.S., but in parts of Africa, Canada and Australia. It most likely was not deliberately introduced, but came as ballast or in grain. It can be distinguished from other purple thistles by the nodding head and because most animals do not eat it, the plants then mature and release as many as 120,000 seeds per plant. Growing between 3-5 feet, the plant has spiny stems and dark green leaves which are bipinnately lobed. It is biennial and forms a bright green easily seen rosette the first year. Once the thistle has developed a tap root after the first year it is much more difficult to eradicate. Ranchers should be careful to not import contaminated hay.

The best time to attack this one is during the first year, the rosettes can be mechanically removed, a late summer application of glysophate is also effective.

Chinese Lespedeza (Lespedeza cuneata)

Connie Murray

Lespedeza cuneata, known as sericea lespedeza or Chinese lespedeza, is an extremely aggressive invader of open areas where it out competes native vegetation. Once established, *Lespedeza cuneata* is very difficult to remove due to the seed bank which may remain viable for decades. Native to Asia and introduced into the United States in the late 1800s, it has been widely planted for erosion control, mine reclamation and wildlife habitat.

Lespedeza cuneata is an upright semi-woody forb reaching 3-6 ft. (0.9-1.8 m) in height with one to many slender stems. Stems are often gray green with lines of hairs along the stem. Leaves are thin, alternate, abundant and three-parted. Leaflets have wedge-shaped bases and are 0.5-1 in. (1.3-2.5 cm) long and hairy.

Flowering occurs from July to September, when small, creamywhite flowers with purple throats develop in clusters of two to four. The fruit is a flat ovate to round single-seeded pod 0.12-0.15 in. (3-4 mm) wide. Pods are clustered in terminal axils, scattered along the stem, and clasped by persistent sepals.

Cheatgrass Bromus tectorum

Linda Raulston

A winter annual grass first documented in the late 1800's that also goes by downy brome and cheatgrass. It is troublesome in winter wheat, alfalfa, fencerows, and railroad right-of-ways. In rangelands it can reduce crop quality and yield, create a fire hazard, injure livestock by causing infections in the eyes and mouth and provides no nutritional value for native sheep, elk and deer.

Cheatgrass is native to southwestern Asia and was accidentally introduced to North America by: 1) contaminated crop seed 2) ships from eastern Europe and western Asia 3) railroads 4) improper livestock grazing in the late 1800's which reduced the vigor of native vegetation and 5) it colonized in homesteads that were abandoned during the Great Depression.

It grows 6-24" tall, emerges with leaves brownish-green maturing to a red-brown with erect and slender stems. Leaf sheaths and flat, twisting blades are covered with soft hair on slender branches that droop to one side. It germinates in fall, grows in winter,, sets seed and dies in hot summer months. The large roots rob the top 1 foot of soil of water just when native grasses, which have the opposite cycle, are starting to develop. Although mature native grasses can get water deep in the soil, new seedlings die from lack of water. Thus, natives can't reproduce and decline as cheatgrass gains over time to dominance..

An herbicide that targets cheatgrass is "Plateau". Fire is a tricky remedy that must be timed to kill the seeds but not native perennials. Amending the soil with carbon will increase microbes and reduce available nitrogen. Natives that produce large biomasses like Bouteloua gracilis (blue grama) and Pascopyrum smithii (western wheatgrass) are better able to survive in the cheatgrass stands. Decreasing soil nitrogen and increasing soil carbon is key to reducing its spread.

Want to spiffy up for spring?

Is that bloopy bird on your license plate giving you the blues? Color Oklahoma has just what you need.....the best looking special license tag in Oklahoma..... the bright, cheerful Gaillardia tag was designed and refined by Color Oklahoma charter members. The WF stands for wildflowers and is followed by your very own special number.

How to buy this happy plate? Or give it as a gift? Just stop by your local tag agency and get an application form. The plate costs \$35, plus \$3 for mailing. Color Oklahoma, now a project of the ONPS, receives \$20 from each plate purchased.

The plate was established as a means to raise money for educating Oklahomans about their treasure house of wildflowers. The aim was to preserve our unique variety of wildflowers and to propagate them on roadsides and in other public areas. The money is used for educational material, seed and matching grant programs for communities. **Special Note:** If you have been enjoying your Color Oklahoma tag since the early years...it might be a little faded. It can be replaced by a newly minted tag with your same original number. Just fill out an application (same cost \$35 plus \$3 mailing) and enclose a request for your old number. It takes about two months for delivery. It is best to do this a couple months before your tax sticker is due to expire.

Enjoy your Color Oklahoma tag knowing your vehicle looks good and you are helping the cause of wildflowers. AND, be sure and wave when you see another Gaillardia tag !







Which roadside do you prefer? Color Oklahoma needs you!

Teri Dunn Chace

Culturally we live in a global village, thanks primarily to a dazzling array of technological advances in transportation and communication. Mixing it up, traveling and trading, importing and exporting, exploring and exchanging ideas and materials—all this is generally considered not only inevitable but also desirable. Awareness and diversity are good, indeed exciting and enhancing. We inhabit a web that binds us all together and seemingly shrinks the world.

Meanwhile, smaller, minority voices can also be heard, protesting that sometimes the local, the unique, the indigenous, is being threatened or lost. An American friend who traveled in Tanzania related that, in a remote bush village, she encountered a small boy wearing a tattered but recognizable John Lennon t-shirt: "Heaven knows where he got it or what its travels were," she reflected in her blog. "It was so jarring and incongruous. Was I glad or sad to see that shirt?"

A similar sensation may assail the informed gardener or botanist who spots a foreign plant in familiar ground. And what about the plant collector who imports and plants, say, a nifty exotic flowering akebia vine from Sichuan Province, China? Or the avid adventurous gardener who snaps up a seedling of foreign origin at a specialized nursery or flower show, just because it looks to be beautiful, just for the challenge, or even simply because he or she values rare or cutting-edge plants? Even if the import is untested in this country?

Yes, gardeners—for a variety of aesthetic and practical reasons—have occasionally been credited or blamed with introducing a "problem plant" to American soil. The examples are legion. Will the aforementioned akebia, so lovely and tame *in situ*, turn out to be a monster here? Will importers and boosters of the rare, foreign, and exotic be praised or blamed in a few years or decades?

Not all introductions have been or are deliberate. In *Weeds:In Defense of Nature's Most Unloved Plants*, British nature writer Richard Mabey cites a variety of other vehicles on which plants have hitched a ride: in ballast, in packing materials, in contaminated seed and feed, in fill soil, as well as in once-popular food crops and useful herbs that have gone rogue. Even on the smallest scale, most gardeners have, at one time or other, brought home a potted plant from the local nursery only to discover a stowaway tucked under the leaves, an unwelcome burdock or thistle.

Other plants have arrived with the best intentions, promoted as ideal for erosion control or low-maintenance landscaping. In Florida, the once-promising imported tree known as bishopwood has been rapidly wearing out its welcome by overtaking fragile native swampland communities. The agents? Native, as well as introduced birds, which relish the seeds. Occasionally an unsavory foreign relative of a native plant worms its way into and ultimately alters the gene pool, as is apparently the case with alders, to name but one example. All this brings to mind that pivotal moment in the sci-fi classic The Andromeda Strain when a scientist exclaims in panic, "There will be mutations! It will spread everywhere! We'll never get rid of it!"

Agents of Movement and Dispersal of Invasives

*packing material (hitchhikes in on)

- *contaminated hay or straw (hitchhikes in on)
- *ballast (stows away in)
- *seeds eaten by birds or animals (which then deposit them in a new location)
- *seeds attached to animal fur, human clothing or footwear (which then detach or fall off in a new location
- *seeds or viable fragments embedded in topsoil, mulch or fill
- *seeds or fruit that float on water (such as sea, river, stream, or lake)
- *plant explorers or foreign travelers that import
- *nursery and seed entrepreneurs that import
- *garden escapees
- *informal transfer (a gardener shares or sell "passalong plants")
- *planed for erosion control
- *bulk seed is "contaminated" (not pure)
- *potting soil (seeds germinate or fragments gain a foothold in nursery pots of desirable plants)

Taken from *How to Eradicate Invasive Plants* Copyright 2013 by Teri Dunn Chace, Published by Timber Press, Portland, OR. Used by permission of the publisher. All rights reserved





Rahmona Thompson gives instructions on the usage of dissecting microscopes.



Abigail Moore (*left*) gives ONPS members a tour of the Bebb Herbarium.



Lynn Nichols shows off plants in the Biology Greenhouse.



Incoming ONPS President Bruce Smith (*left*) and outgoing ONPS President Joe Roberts (*right*).



Chinese Lespedeza *Lespedeza cuneata* Photo : Chris Evans, University of Illinois



Cheatgrass *Bromus tectorum* Photo: Chris Evans, University of Illinois



Musk Thistle *Carduus nutans* Photo: Chris Evans, University of Illinois



Johnsongrass *Sorghum halepense* Photo: Steve Dewey Utah State University, bugwood.org



Privet *Ligustrum sinese* Photo: Chris Evans, University of Illinois



Japanese Honeysuckle *Lonicera japonica* Photo: Amy Morris

Chinese Privet (Ligustrum sinense)

Ray Luth

Ligustrum sinense is native to China and was introduced into the United States in 1852 for use as an ornamental shrub. It is used for hedge and mass plantings, and sometimes as single specimens for its foliage and its profusion of small white flowers. It continues to be widely sold in the nursery and gardening industry. A survey of appropriate herbaria reveals collection records from Georgia as early as 1900. Based on herbarium records the species has become naturalized and widespread in the southeast and eastern U.S. during the 1950's, 60's, and 70's. Taylor et al. (1996) notes the rapid, recent spread of *Ligustrum sinense* in Oklahoma.

Privet is a successful invasive species because of its ability to outcompete and therefore displace native vegetation. This competitive superiority to native vegetation is connected with the plant's ability to adapt to different light conditions. Privet is an ideal invasive species because it reproduces both sexually and asexually. Through sexual reproduction, privet produces seeds that are easily dispersed by wind and animals. These seeds can rapidly colonize disturbed soil such as that perturbed by fires, forest clearings, erosion, or abandoned agricultural land. Privet matures quickly, which allows for a short generation cycle and even greater dispersal. The roots of privet can reproduce asexually through root suckers. This vegetative reproduction makes privet difficult and costly to control because root fragments left in the soil can sprout and grow new plants.

One reason why privet is so invasive in the United States is because it has few native shrub competitors. In a sense, privet is invading and exploiting an open niche within the southern U.S. floodplain ecosystem. Prior to privet invasion much of the native land was clear and open; currently, privet forms a dense thicket which chokes out other, usually native, plant life. Thus, privet is believed to be phylogenetically distinct compared to its native cousins.

Evidence suggests that climate changes, brought about by increased CO2 concentrations, will increase the spread and proliferation of privet. It was predicted that by the year 2100 privet will have spread as far north as Maine, sweeping across the mid-western United States into Nebraska. Thus, states that are currently free from privet invasion (Michigan, Ohio, Indiana, Illinois, Kentucky, Virginia, Pennsylvania, etc.) are all predicted to become invaded with privet within the next 100 years unless either privet is contained or conservation efforts decrease the effect of pollution on climate change.

Johnson Grass (Sorghum halepense)

Melody Hobbs

Brought to the U.S. from Turkey around 1835 by South Carolina Governor John Means, it was originally called 'Guinea Grass'. But it was Alabama planter Col. Willian Johnson who gets the erstwhile 'credit' for spreading Sorghum halepense far and wide across the South after he planted it in the bottom land along the Alabama River. Touted as a forage crop for livestock, capable of producing up to two tons of hay per acre even when cut four times a year. In spite of the high yields for hay, it wasn't long before people realized that when stressed from drought or by a light frost, Johnson Grass produces lethal levels of HCN which causes cyanide poisoning in the very animals it was brought here to feed. It is also known to produce toxic levels of nitrates and has proven fatal for grazing cattle, sheep and goats. It is almost unbelievably prolific, reproducing from seeds, rhizomes and broken bits of rhizomes. A single plant can produce up to 80,000 seeds in one season and even five year old seeds have a 50% viability rate. Listed as a noxious weed in 24 states, Johnson Grass not only has the distinction of being the first plant to earn a Federal appropriation for weed control in 1900, it's also considered one of the ten worst weeds in the world. The grass grows approximately 3 feet tall with coarse . Bright green leaves and purplishbrown seedheads that can reach 6 feet tall. Commonly, control involves keeping the grass cut short, removing seedheads, and careful application of an herbicide such as glysophate. Johnson Grass is not a problem in a tended lawn and it avoids shade. Tilling and digging are not recommended except for small areas in a garden, as even broken bits of rhizomes can sprout. Research in Arizona and Kentucky suggest that rhizomes that are deeply buried cannot sprout and do not survive the year. Seedheads, stalks and rhizomes should be bagged or burned.

"One of the best gifts you can give a poet is to present them with field guides-to rocks, to stars, to birds, to wildflowers, to trees and bushes, to butterflies, to reptiles and amphibians. Because when you look at anything long enough to be able to identify it, you see far more clearly and you make a tiny beginning at understanding the life, the place, the history of that bird or rock or mammal.."

Marge Piercy

"The one who dies with the most field guides, wins."

Joe Roberts

Invasive Watch Chad Cox Not Your Buddy: Bermudagrass

Cynodon dactylon, bermudagrass, native to eastern Africa, was introduced here in the 1800s as a forage crop, for which it still serves but not often by choice. As an invasive plant, it by virtue of its invasiveness has a peculiar stature. All naturalists recognize its invasiveness but it gets a pass on invasive lists because it is a common lawn grass; it is a common lawn because it is often not the lawn by choice. Bermudagrass is cursed by gardeners, by landscapers with a lawn of another species and by anyone else trying to control it.

This special status is also apparent in that only Arkansas, California and Utah list it as noxious, that is illegal by law, although it is no more obedient in most of the rest of the states. Even in Utah one county does not rank it as noxious, no doubt because some folks want to keep their bermudagrass lawns. Bermudagrass is not fond of cold climates so northern states are less concerned but not along the western coast where it grows up in Canada.

In Oklahoma, bermudagrass grows primarily in the eastern half of the state but will grow in the other half where there is more moisture. It certainly does not take to our dry prairies. Also, bermudagrass does not grow well in shade and therefore is not found in wooded areas with a good canopy or dense under growth. Even in small sunny spots in wooded areas, however, it can show up and grow.

Bermudagrass is a good example of what characteristics make a good (or bad depending on view) invasive plant. It spreads rapidly by long stolons that also root at most nodes. The new rootings add to the seed production. It also spreads by rhizomes and these rhizomes store plenty resources to assure new plants in bad times, such as, when you spray the topside plant with herbicide. A sound recommendation is to spray the area for two separate years before planting another lawn grass by seeds; or do as many others do, enjoy (?) your bermudagrass lawn. In this case, another recommendation is to be careful in your plans for flower beads and garden.

The one good thing about a bermudagrass lawn is you do not have to worry about it being taken over by bermudagrass.



Bermuda Grass *Cynodon dactylon* Photo: Steve Dewey, Utah State university, bugwood.org



Lynn Michael, 1st Place, Host Plant Passiflora incarnata



Sandy Graue, 1st Place, Native Landscape



Lynn Michael, 1st Place, Plant of the Year Centaurea americana

2018 Anne Long Award

Please consider nominating an individual or group for the 2018 Anne Long Award. The Award is given at the Society's annual meeting in warm remembrance and honor of one of the ONPS founders, and an early advocate for wildflower protection. The Award recognizes individuals or groups who have made outstanding contributions to the stated purposes of ONPS. The first recipient was the Ninnekah High School Science Club and the most recent Connie Murray.

Nominations are being accepted for the Award from now through August 31, 2018. Include the complete names and addresses of both the individual(s) making the nomination and the nominee(s); a contact person if the nominee is an organization; and supportive documentation for evaluation by the Awards Committee.

2018 Betty Kemm Award

There is still time to submit a nomination for the 2018 Betty Kemm Service Award. Named for the first state president and founding member of the Society, the Award recognizes members of ONPS who have demonstrated service over and above that normally associated with expected levels of activity. Deadline for receipt of entries is August 31, 2018. The nomination must include in writing sufficient documentation to support the nominee's qualifications for receiving the Betty Kemm Service Award. Previous recipients have included Ruth Boyd, Dr. Paul Buck, Betty Kemm, Patricia Folley, Joanne Orr, Chadwick Cox, Tina Julich, Dr. Sheila Strawn, Mary Korthase, Lynn Michael, Gloria Caddell, Dr. Ron Tyrl, Alicia Nelson, Elaine Lynch, Karen Haworth and Joe Roberts. The 2018 Betty Kemm Service Award will be presented during the annual meeting of ONPS in the fall.

> Send award nominations to: Sue Amstutz, at d-s-amstutz@cox.net *or* Oklahoma Native Plant Society *att: Sue Amstutz* PO Box 14274 Tulsa, OK 74159

The Oklahoma Natural Areas Registry

The Oklahoma Natural Areas Registry is a voluntary land conservation program for private landowners who have on their property rare species, unique geologic features, or excellent examples of natural habitat. We have members who boast bald eagle nests, prairie dog towns, fresh water springs, ancient cross timbers, and so much more! The Registry Program encourages citizen-based conservation of these special natural areas by promoting the awareness of rare species, natural communities, and important geologic features. Several registered natural areas harbor rare plants such as seaside alder, golden glade cress, and Ozark spiderwort.

More than 90 natural areas are registered in the program with a majority being on private land. Registry Field Days are an exceptional opportunity to tour these properties not normally open to the public. Landowners showcase their land, including conservation practices, management techniques, and interesting flora and fauna.

Starting in 2018, the Registry Program will collect seeds from iconic Oklahoma native plants to be deposited in the Oklahoma Native Seed Library. Our goal is to acquire seeds from around the state to represent a variety of genetic diversity. We will launch the initiative by focusing on charismatic grasses of the Oklahoma prairie and woodlands. As the collection grows, we plan to expand the species we collect and eventually offer seeds for native plant landscaping and restoration projects. This fall we will host a Registry Field Day centered on a seed harvest workshop to demonstrate how to collect and document seed collections for our seed library. We hope that Registry Members will be interested in being part of this project – we would love to collect seeds on Registered Natural Areas across Oklahoma!

For more information on the Oklahoma Natural Areas Registry, the Registry Field Days, or the Oklahoma Native Seed Library, please see our website at: <u>http://biosurvey.ou.edu/oklahoma-natural-areas-registry/</u> or contact Priscilla Crawford, Conservation Specialist, 405-325-7658, <u>prill@ou.edu</u>

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Gaillardia

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Patrick Bell	Central
Elaine Lynch	Cross-Timbers

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