

Fall 2018 Ozarks Chapter Arkansas Native Plant Society Newsletter



Nemophila phaceloides, large blue eyes at Faith and Mike Shah's wildflower farm

The spring/summer of 2018 was slightly atypical as far as past Ozarks summers; however, we had a terrific lineup of hikes and walks and met lots of nice people along the way. Here is hoping that you all had a good summer in spite of the fickle weather patterns. I guess it is the new norm so we should get used to it. We are hosting a couple of hikes/events this fall and will list other events being held around the state. I hope that you can make at least one of them. We look forward to planning the hikes for next year at the Harmony Mountain Retreat. If you have any suggestions or places you would like to take us, please let me know at wbhint@gmail.com

Reports on Spring/Summer Hikes:

April 14, 2018, Botanical Garden of the Ozarks

Lissa Morrison, BGO horticulturist, took us on a cold, very brisk walk around the gardens. The temperature was freezing and the cold wind blowing. Bundled up and in attendance were Nancy Cunningham, Sonia Zimmer, Dee Collins, Don Mills, Becky and Ken Goff, Carey and Debbie Chaney, Carol Dagget, Ginny Masullo, Steve Smith, and Gloria Tran. This was a wonderful opportunity to learn about native species that do well in a landscaped setting. Due to the cool spring, few perennials were blooming so our focus became the shrubs and small trees around the grounds.

The first plant we looked at was a low growing short shrub, *Juniperus virginiana* called 'grey owl.' This variety provides an attractive small conifer as winter cover for birds and beneficial insects. It is very attractive. Three species of holly at BGO include: *Ilex glabra* "inkberry" which is evergreen; *Ilex verticillata* "winterberry" which is said to provide food for 48 species of birds and can grow up to 15' tall; and *Ilex vomitoria* "yaupon" which is native to the Eastern United States and provides cover as well as bright red berries in the winter, usually less than 9 ft. The specific epithet, *vomitoria*, is said to have been given by mistaken Europeans (I assume botanists) who named it, having watched different indigenous tribes during ceremonies. It is thought that this was due to the native Americans having drunk large amounts of tea after fasting or having used other plants as well as yaupon in the tea mixture. Yaupon tea is sold today for consumption in many natural food stores. According to several resources, it is the only indigenous plant native to North America containing caffeine. *Ilex decidua* is an Ozarks species of holly that is also a great landscaping, habitat plant for wildlife. There have been nine species of holly documented in Arkansas, with one introduced species - Chinese holly -and two species of concern, Georgia holly *Ilex longipes* that is being tracked by ANHC and winterberry, *Ilex verticillata*, whose native populations are being threatened in the state. It has been documented in five counties. *Ilex opaca* is probably the most familiar holly to most people, with its shiny green leaves and bright red berries. The trees are dioecious, meaning that male and female flowers are on separate plants.

Both *Viburnum prunifolium* and *Viburnum rufidulum* were present along the walkways. The difference between them is listed as the presence of red hairs on the mid-vein of the lower leaves and petioles of *Viburnum rufidulum*. We also noticed that *Viburnum prunifolium* with acute leaf tips while *V. rufidulum* leaves were more rounded or blunt at the tip. *V. rufidulum* was in bloom this cold day. *Physocarpus opulifolius*, ninebark, has varieties from 3' to 10' and is another recommended shrub. New Jersey tea, *Ceanothus americanus*, is an attractive, pollinator-attracting shrub that grows up to three feet tall and has white, fragrant flowers in the spring. Other interesting natives include muscledwood, *Carpinus caroliniana*, and witch alder, *Fothergilla major*.

Lissa also recommended *Magnolia acuminata*, cucumber tree or cowcumber tree. It grows up to 35' and acts as a host for the Eastern tiger swallowtail. Pruning is the key to get these native species looking good in the landscape. Lissa has offered workshops on how to keep native species looking attractive throughout the year. Pruning and cutting back are the tools one uses to control growth. It is hard work, but it can be done as she demonstrated to us on this cold April day. I knew that BGO had a beautiful

native plant garden, but I had not noticed how many native species are currently being used in their other landscaping as well.

Lissa's handout [Well Behaved Natives for the Home Landscape](#), Audubon Arkansas' [Native Arkansas Plants for Birds and Butterflies](#), and the University of Arkansas Extension Service publication [Native Plants that Attract Butterflies](#) by Janet Carson are all helpful in planning your native gardens. They are usually available at BGO when you visit.

We appreciate the knowledge, experience shared, and the preparation and time Lissa used in order to give us a good look at many of these species on the BGO grounds. Be sure to visit the Botanical Garden of the Ozarks and join them in helping to teach visitors about the advantage in using native species in one's home landscape. Consider volunteering whether in the garden or the gift shop. BGO is a great resource we have right here in NWA.

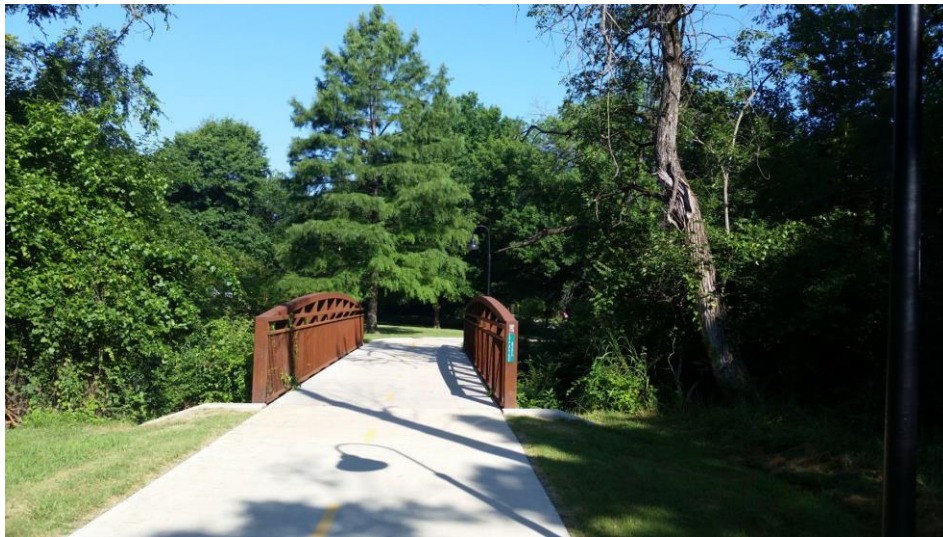
April 18, 2018 - Greenway Trail hike continued from Razorback Road east to bridge

Aaron Thomason met us and led us along this stretch of the Greenway Trail as Bob Morgan was out of town. Lissa, Anne, Jordan, Kitti, Martina, Eric, Rick, Akia, and I met in the Fog horn parking lot. An interesting side attraction was the creek side that Watershed Conservation Resource Center had helped stabilize by planting natives such as *Amorpha fruticosa*, wild indigo bush. Aaron was glad to see that the effort was doing well. *Viburnum prunifolium*, Southern black haw was found growing on the bank. I commented that a natural population of basketflower (*Plectocephalus americanus*) had been observed along this creek bank the past three summers and hoped that it would return this year. The new apartment buildings that now covered the area parallel to Razorback Road had also been covered in tallgrass prairie species three years ago. We found rose vervain, *Glandularia canadensis* in bloom as was false garlic, *Nothoscordum bivalve*. A caric sedge, *Carex* sp., was also in flower but not mature. An unknown rush in the creek was just starting to develop florets. After crossing the road, we discovered an enormous amount of bush honeysuckle, Japanese honeysuckle, and Chinese privet and we even found one healthy multiflora rose; in fact, non-native invasives are still stealing the show, able to grow in spite of the cold temperatures and having little to no competition for light as most natives have not leafed out yet. The leaf stalks of both *Carduus nutans*, nodding or musk thistle, and *Cirsium vulgare*, bull thistle were about two feet tall. Wildflower non-natives included dead nettle, *Lamium purpureum*, dead nettle, *Lamium amplexicaule*, henbit, *Capsella bursa-pastoris*, Shepherd's purse, *Cardamine* sp. cress, *Vicia sativa*, common vetch, and *Barbarea vulgaris*, yellow rocket. Natives, *Geranium dissectum*, cut-leaf crane's bill, *Geum vernum*, early avens, *Ranunculus hispidus*, hispid buttercup, *Valerianella radiata*, Miner's lettuce or corn salad were also found blooming. A large elm limb was broken and hanging down near the ground. We examined the fruit and discovered that the winged fruits were hairy; the tree had been fairly tall and the twigs were not winged so we decided it was American elm. A few bois d'arc aka Osage orange or hedge apple *Maclura pomifera*, were found. This wood was once used to make war clubs and bows by Native Americans. The white milky latex juice found in the fruit keeps the fruits from being eaten readily; some people say that if you cut it in half and put a half in a closet, it will repel insects. The tree is fairly easily recognized by the thorns on the twigs. According to a Missouri Botanical Garden publication, "The common name osage orange is primarily in reference to a combination of factors: (a) the original range of the plant overlaps in part the range of the Native American Osage Indian tribe and (b) the bark, wood, and roots are orange and the fruits somewhat resemble oranges in texture. It is not related to oranges, however, but is a member of the fig family. Each fruit is actually a

dense cluster of hundreds of small fruits. The wood is long-lasting, dense and tough. Native Americans used the wood for bows, hence the common name of bowwood. French trappers named it bois d'arc, which was anglicized into the common name of bodark. As settlers pushed westward toward the Mississippi River and beyond in the 1800s, fencing materials were quite expensive and in short supply. In lieu of fences, thousands of miles of hedgerows were planted, with osage orange being a prominent inclusion. Osage orange suckers freely and quickly forms an impenetrable barrier due to its vicious thorns which are particularly nasty on new shoots. Hedgerow usage began to wane in the 1870s, however, with the advent of barbed wire. It has certainly deterred me from trying to talk while passing through a grove.

Wednesdays on the Greenway

Bob Morgan



During the spring of this year, the Ozark Chapter of the Arkansas Native Plant Society continued its series of urban native plant hikes, Wednesdays on the Greenway. The Razorback Greenway is a 37-mile paved multi-use trail that runs from south of Walker Park in Fayetteville to Blowing Springs in Bella Vista. The Greenway is the backbone of a much more extensive trail system that will ultimately connect communities, cultural resources, parks, and business districts in NW Arkansas. Bentonville, Rogers, Springdale and Fayetteville are also actively extending the trail system with auxiliary trails. The greenway is heavily used. A 2017 report by the Walton Family Foundation found that annual usage was over 65,000 pedestrians and 83,000 bicyclists. That puts per capita use of the trail system ahead of such noted trail communities as San Francisco and Portland.

This year, our Wednesdays on the Greenway hikes went to four different locations: April 4, we gathered at Gordon Long Park where the Greenway crosses Garland Ave. and hiked to the north along Skull Creek. Burnetta provided her plant identification skills to a group of a dozen or so native plant enthusiasts. On April 18 we strayed from the Greenway proper and met at the Town Branch trail at Razorback Road. At this site, the Watershed Conservation Resource Center (WCRC), a Fayetteville non-profit that does

environmental restoration work, had previously relocated native plants from a construction site on the corner back to safety within the cities streamside setback area. Aaron Thomason from the WCRC lead that hike. Then on May 2, we visited another WCRC project along the Gully Creek trail and Niokaska Creek. Several years ago, the City of Fayetteville hired the WCRC restored natural channel conditions along Niokaska Creek. As part of the process, WCRC planted hundreds of native plants in the riparian zone of the creek. Ms. Sandi Formica, president of WCRC lead the hike that day. Our final hike of the year was May 16 along the Mud Creek trail at Vantage drive.

The Razorback Greenway and its associated trails are a wonderful resource for NW Arkansans to get a quick dose of nature. A walker or cyclist can frequently forget that he/she is riding through the second largest metropolitan area in Arkansas. Unfortunately, most of the vegetation along the trail system is either non-native or worse yet, invasive. Burnetta showed example after example, Japanese stiltgrass, amur honeysuckle, privet, etc. etc. etc. There are a few exceptions. Earlier this summer, I spotted a cardinal plant along the trail in a wetland area north of Walton Ave as I was cycling into Bentonville. Then there are the two areas where the WCRC has replaced natives mentioned above. And in addition, a few years ago, the Fayetteville Natural Heritage Association lead an effort to restore native prairie grasses and flowers in two pastures on the north side of Lake Fayetteville. These are a start; much more needs to be done.

May 12, 2018: Parker Ridge Road, Newton County with Kent Bonar

Fifteen people met to experience a plant and wildlife tour led by Kent Bonar. We drove to the Parker Ridge Road area where the USFS has recommended various treatments in the near future including herbicide use along the roadways and prescribed burns over thousands of acres to reduce fuel loading. This area provides prime plant and wildlife habitat and we were not disappointed in the diversity of both that we were able to see and hear. We drove to a bluff along the road that overlooked the valley below and we could see the Little Piney Creek flowing through the valley. Summer tanagers and cedar waxwings were there to greet us. Trees found on the outcrop or bluff walls were: *Pinus echinata*, shortleaf pine; *Quercus velutina*, black oak; and *Quercus alba*, white oak. Serviceberry, *Amelanchier arborea*, and *Vaccinium arboretum*, farkleberry along with *Viburnum rufidulum*, rusty black haw were also present. The roadside from the pull-off to the river displayed a wide array of wildflowers including *Potentilla simplex*, cinquefoil, *Spigelia marilandica*, fire pink; *Kirgia biflora*, false dandelion; *Cynoglossum virginianum*, wild comfrey; *Parthenium integrifolium*, feverfew; *Monarda bradburniana*, Eastern beebalm; *Astragalus crassicaarpus*, ground plum; *Penstemon digitalis*, beardtongue; and *Polygala senega*, field milkwort. After this, Kent suggested that we walk along a USFS gravel road to listen for diversity in birds and look for plants. The number of bird species increased dramatically with ovenbird, black and white warbler, red-eyed vireo as well as white eyed vireo, Tennessee warbler, scarlet tanager, yellow-throated vireo, Swainson's thrush, and Northern parula. Kelly and Donna Mulhollan and Kent were excited about the birds they identified, mostly through the calls. The wildflowers were no disappointment and included: Ohio spiderwort, *Tradescantia ohioensis*; white false wild indigo, *Baptisia alba*; ; soft pathrush, *Juncus*

effusus; *Aster patens*, late purple aster recognizable by its clasping leaves; and Mountain azalea, *Rhododendron prinophyllum*. We discussed how the potential proposed management actions could impact wildlife and plants we had seen on the hike. Kent gave us the name of Mike Mulford at the Ozark National Forest headquarters in Russellville, AR to contact in order express concerns.

Attendees included: Kent Bonar, Kelly and Donna Mulhollan, Deb Bartholomew, Aika Nakamura, Ginny Masullo, Steve Smith, Sandy Pope, Don Mills, Eric Fuselier, Lynn Phillips, Jean McConnell, Jerry and Cheryl Park, and Burnetta Hinterthuer.



Kent and I first met in 1971 when we worked for Arkansas State Parks. Out of college, we were eager to share our knowledge with the visitors to the state parks. This was my only claim to fame as I was one of the first females to be hired as a State Park Naturalist. My supervisor was skeptical that women could hike three miles--those were the good old days. Kent and I have now known each other for a long time, 47 years! Some of my favorite hikes have been ones that we have taken in Newton County. No one has hiked Newton County trails more than Kent, and he knows where the neat habitats are. A video *The Naturalist* was made about Kent in which he was called the John Muir of the Ozarks, a good descriptor of this master naturalist. The painstaking detail of his plant illustrations have now been preserved in An Arkansas Florigeum (2017) with his illustrations added to a copy of The Atlas of Arkansas Vascular Plants that Dr. E. B. Smith first published in 1979.

May 16, 2018 Niokasa Creek at Gully Park with Sandi Formica

Niokasa Creek Restoration at Gully Park by Sandi Formica

The Gully Park Stream Restoration on Niokasa Creek will be 10 years old this December! The project not only provides both terrestrial and aquatic habitat in the middle of Fayetteville, it protects valuable park land, walking bridges, water and wastewater lines, and improves water quality. Over a decade ago, the Watershed Conservation Resource Center (WCRC) partnered with the City of Fayetteville (City), the Arkansas Natural Resources Commission (ANRC), and US Environmental Protection Agency Region 6 (EPA) to restore a 1200 ft section of Niokasa Creek that flows through Gully Park. The stream restoration project, located in the Illinois River watershed, was funded with an EPA 319 grant (administered by ANRC) with the City providing matching funds. Initiated in 2006, the project was completed December 2008.

The project addresses the effects of upstream land use changes that have impacted the stability of Niokasa Creek over the years. New roads and rooftops from urbanization in the watershed increase stormwater runoff, resulting in higher and more frequent flows in the stream channel.

The restored section of the Mud Creek tributary was incised (cut into or carved out) and previously had several vertical cut-banks, ranging in height from six to eight feet, eroding into the park land. These banks contributed excessive sediment to the stream and had the potential to destroy walking trails and undermine wastewater utility lines. Rather than using traditional approaches, such as rip-rap, to stabilize banks, the WCRC designed a natural channel that



Lower section of Niokasa Creek restoration site before (left) and after restoration (right)

reduced sediment from the banks, stabilized the banks, and enhanced wildlife habitat for a 1,200 foot section of the stream. Small floodplains, rock structures that deflect flow away from banks, and defined riffles and pools were constructed. Over 4,500 native grasses, shrubs, and trees were planted during and following construction. Also, access points were created from native stones. The WCRC continues to monitor and maintain the project to evaluate effectiveness and ensure the longevity of the restoration design. By utilizing a natural channel design approach, project objectives of improving water quality and eliminating potential safety concerns were achieved while the beauty and biological life of the stream were protected. For more information visit www.watershedconservation.org.

May 19, 2018 - Faith and Michael Shah's Native Plant Garden, Eureka Springs, AR

In 2015, after retiring and moving to Eureka Springs, Faith and Michael Shah began working to turn their acreage into a native plant sanctuary and start a local native plant group. It is easy to see that in three years, they have succeeded. This is the backyard I have always dreamed about. She mentioned that they have had help in doing this and not give them all the credit. Still, the vision and the final product (which is never final) is amazing. Nineteen people, members of OCANPS (Ginny Masullo, Steve Smith, Becky Goff all of Fayetteville, Carol McCorkle, Mary Hogue, Jackie Leatherman from Mtn. Home, Quinton Welch from Green Forest, Frank Reuter and Judith Griffith from Berryville) and many Eureka Springs Master Gardeners and neighbors came together to take a walking tour on a hot sunny day in May.

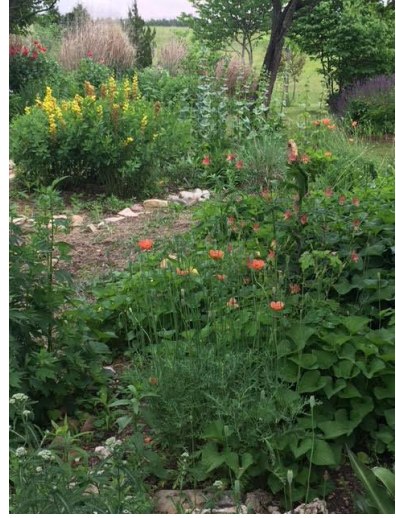
An old large bur oak on a slope provided an interesting backdrop to the lower pasture restoration site. In several places, black plastic was lying on top of the soil in preparation. I hesitate to use the word 'weed' as we all know it is just a psychological term meaning a plant that is not wanted where it is currently growing. They have used this method for suppression of weeds in the past and recommend it. Several buildings have been constructed for gardening purposes and also as guest houses. Sculpture work by Faith's brother who lives nearby are scattered around the grounds, some attached to the buildings, some free standing. This creates a beautiful background and artistic interest for the flowers and flower lovers alike.

Many species were in bloom at this time of year, tall grass prairie species such as *Coreopsis lanceolata*, *Glandularia canadensis* (rose vervain), *Monarda fistulosa* (bergamot), *Callirhoe digitata* (wine cup), *Baptisia sphaerocarpa* (yellow false wild indigo), *Oenothera speciosa* (showy primrose), *Oenothera macrocarpa* (Missouri primrose) and *Penstemon cobaea* (cobaea *Penstemon* aka Prairie Penstemon). *Iris virginica* (Southern blue flag) usually associated with wet areas was also in bloom. Woodland and edge species were also represented. The most notable was the large flowered blue eyes, *Nemophila phacelioides* that was recently found at the site. Others included *Iris cristata*, (crested iris), *Trillium ozarkana* (Ozark trillium), *Asarum canadense* (wild ginger), black cohosh (*Actaea racemosa*), Celandine or wood poppy (*Stylphorum diphyllum*) and bloodroot (*Sanguinaria canadensis*) which had not yet bloomed, and *Gladiolus byzantinus*, an heirloom gladiolus with beautiful magenta flowers. According to an article about them in oldhousegardens.com the gladiolus were introduced in to the Americas in 1576. Earlier names included corn flag of Constantinople and Turkish flag.

Faith and Michael helped to form the Eureka Springs Native Plant Garden Project and they have worked on establishing a native plant garden downtown and held a Native Plant Faire to spread the word and encourage people to plant native species. This year's fall fair falls on Saturday October 13th, the same weekend as the ANPS Fall Meeting. For those native plant enthusiasts who can't make it to Fort Smith, you are welcome to join them at the Eureka Springs Community Center, 44 Kings Highway from 9 – 1. There will be speakers, educational booths, and plants for sale.



Flower and Sculpture Garden



Baptisia sphaerocarpa and *Papaver dubium*



Gladiolus byzantinus

Future Events:

Native Plant Walk and Cook-Out

Sunday | Sept. 9, 2018

9:30 am to 12:30 pm

Brentwood Stream Restoration Site on the West Fork White River

The Watershed Conservation Resource Center (WCRC) in partnership with Beaver Watershed Alliance will host the Arkansas Native Plant Society, for a native plant identification. The plant walk will take place along the Brentwood Stream Restoration site on the West Fork White River, where participants will see restored river channel, riparian, and wetland areas. Wear sturdy shoes and bring waterproof boots or waders if you have them.

Meet at the Brentwood Community Park on US Highway 71 (20 miles south of Fayetteville) at 9:30 AM on Sunday, September 9th. *(Need a ride? Meet at the WCRC offices, 380 W. Rock Street, Fayetteville, at 9:00 AM)*

Following the plant walk, you can enjoy a complimentary lunch on the river –

Grilled hamburgers, hot dogs, veggie burgers, and drink.

Call Lori to register at: 479-444-1916 or llinn@watershedconservation.org

October 12 – 14th, Annual Fall Meeting, Ft. Smith, AR

Everybody is welcome to attend, whether you are a current ANPS member or not! Meeting registration is only \$10 with no pre-registration required. Registration will begin at 5:00 PM on Friday, October 12.

MEETING LOCATION

River Valley Nature Center
8300 Wells Lake Rd
Fort Smith, AR 72916
<http://www.rivervalleynaturecenter.com>

HOTEL LOCATION

Holiday Inn Express Fort Smith Executive Park
6813 Phoenix Ave
Fort Smith, AR 72903
(479) 452-7500
www.hiexpress.com/fortsmithar

We have reserved 25 rooms (12 two queen rooms and 13 king rooms) at the reduced rate of \$89.99 plus tax per night. **Reservations must be received by August 31, 2018** to guarantee the reduced rate. Be sure to mention that you are with the Arkansas Native Plant Society when making your reservation.

Individuals are responsible for their own room and tax.

DINING OPTIONS

We will have a potluck meal Friday and Saturday evenings at the Nature Center. Bring a dish or just come and eat! There are also several dining options in the Fort Smith area near the hotel.

EVENING PROGRAMS – at the River Valley Nature Center

Friday

7:00 p.m. – Our Annual **NATIVE PLANT AUCTION!** Bring your native plants, books, homemade jelly, jewelry, or plant art for the auction. Proceeds from the auction support ANPS scholarships, research grants, and small grants programs.

Saturday

6:00 p.m. – Membership Meeting

7:00 p.m. – Evening Program:

7:00-7:30 p.m. – **Logan Estes**, Graduate Student at the University of Arkansas and 2017 ANPS Delzie Demaree Research Grant Recipient, will speak on the topic “**Where are all of Arkansas’ chinquapins? – An ecological assessment of *Castanea* throughout the state.**”

7:30-8:00 p.m. – **Dwayne Estes**, Professor of Biology at Austin Peay State University and Executive Director of the Southeastern Grasslands Initiative (<https://www.segrasslands.org>), will present the topic “**The Southeastern Grasslands Initiative: Charting A New Course for Conservation in the 21st Century.**” The Southeastern Grasslands Initiative (SGI) is a collaboration of leaders in international biodiversity conservation led by the Austin Peay State University Center of Excellence for Field Biology, in partnership with the Botanical Research Institute of Texas, North Carolina Botanical Garden, and Roundstone Native Seed. The SGI seeks to integrate research, consultation, and education, along with the administration of grants, to create innovative solutions to address the multitude of complex issues facing Southeastern grasslands, the most imperiled ecosystems in eastern North America.

8:00-9:00 p.m. – **John Manion**, Kaul Wildflower Garden Curator at the Birmingham Botanical Gardens (<https://www.bbgardens.org>), will speak on the topic “**Conversion Therapy...to the Wonder of Native Plants.**” Until as recently as a few decades ago, native plants were the purview of people who wore tied-dyed shirts and burned lots of incense; In other words, a counter-culture. Since that time, there has been a sea change in attitudes towards the importance of our native flora and its habitats. How do we continue this conversion to a deeper understanding that it’s about much more than pretty plants? John will illustrate how he and Birmingham Gardens work to archive this understanding.

OCANPS Annual Fall Meeting of OCANPS at Harmony Mountain. November 2nd – 4th

Friday night, we will have a potluck dinner and the plant auction. Bring plants, seed, plant books or other botanical crafts/foods to help raise money for our OCANPS Chapter. We use the money for donations to the Ozark Natural Science Center and the Audubon Halberg Ecology Camp at Camp Clearfork. On Saturday, we will take a hike in the area which will be announced on Friday night. We also have our annual business meeting at which officers are chosen for the coming year. The positions are: President, Vice President, Secretary/Newsletter and Treasurer. Mary Reuter has graciously volunteered to be treasurer since we started in 1995; I have remained the newsletter editor for almost as many years. If you are interested in being an officer, please let me know. This is always a time to get together, enjoy each others' company and cooking and make plans for the coming year. Be thinking of hikes you would like to take in 2019. If you have further questions, please call me at 479-430-0260 or email me at wbhint@gmail.com

Harmony Mountain Retreat is found in Newton County on Smith Mountain, about 11 miles south of Jasper. Directions are found at: <http://www.buffaloriverlodging.com/directions/>

Membership:

To become a member of the state ANPS, mail a check for \$15 to:

Katherine Lincourt, Treasurer, 2625 Charter Oak Drive, Little Rock, AR 72227

To join the Ozarks Chapter ANPS mail a check for \$10 to:

Mary Reuter, 121 CR 432, Berryville, Ar, 72616