

January-February 2008

Vol. 23, No. 1

Missouri Native Plant Society

Calendar of Events

Hawthorn Chapter

Monday, Jan. 14: Regular meeting at the Unitarian Church, 2615 Shepard Blvd. Dennis Stegall, camera manager at Columbia Photo, will present a program giving tips on photographing plants and flowers.

Monday, Jan. 21: Plant propagation workshop, 7 p.m. at the Unitarian Church, 2615 Shepard Blvd. Snow date: Jan. 28

Thursday, Feb. 21: Lunch with native plant enthusiasts! 11:30 a.m. at Felini's, 700 E. Broadway. All are invited.

February winter hikes will be announced in January. For more information contact Paula at (573) 474-4225.

Kansas City Chapter

Thursday, Jan. 17: Regular meeting at 7 p.m. at the Discovery Center, 4700 Troost, Kansas City. This is our annual planning session and election of officers.

Osage Plains Chapter

Monday, Feb. 18: 7 p.m. at the Clinton office of the Missouri Conservation Department.

Ozarks Chapter

Tuesday, Jan. 15: Chapter meeting. Program to be announced. MDC Ozark Regional Office, 551 Joe Jones Blvd, West Plains. 6:30 p.m. For more information, contact Susan Farrington at (417) 255-9561 x 307.

Tuesday, Feb. 19: Chapter meeting. Program to be announced. MDC Ozark Regional Office, 551 Joe Jones Blvd, West Plains. 6:30 p.m. For more information, contact Susan Farrington.

Field trips will resume in the spring.

St. Louis Chapter

Thursday, Jan. 24: Chapter meeting at 7:30 p.m., Powder Valley Nature Center, in Kirkwood. Program by local author and longtime member, Barbara Perry Lawton: "In Search of the Wild Umbels."

Thursday, Feb. 28: Chapter meeting at 7:30 p.m., Powder Valley Nature Center, in Kirkwood. Program by CPC Conservation projects coordinator, Anna Strong: "Star Cacti and the Animals that Love Them." As spring arrives in southernmost Texas, Anna's program will discuss the endangered star cactus and its environment.

2008 field trips and state board meetings

Mark your calendar and make plans to join the Missouri Native Plant Society for these field trips in 2008. Details will follow. Everyone is welcome to the board meetings, too.

Spring field trip: April 4-6 — Joint field trip with the Arkansas Native Plant Society We'll travel to see Alabama snow wreath and other early spring flowering plants.

An additional trip on Friday is being planned to see the Ozark spring beauty.

We will probably be staying in Harrison, Ark.

Summer field trip: June 20-22 — Northwest Missouri

We'll add to a plant list for Squaw Creek National Wildlife Refuge started last fall.

There are many other loess hill places to see in the area including Little Tarkio Prairie, where we should see the western prairie fringed orchid in flower.

We will probably stay in Mound City.

The society's annual meeting will be Saturday evening.

Fall field trip: Sept. 12-14 — LaBarque Creek Watershed

This Missouri Department of Conservation conservation opportunity area is a unique moist sandstone canyon area offering opportunities to see ferns, bryophytes and state-listed club mosses.

This area is on the outskirts of St. Louis. Where we stay depends on our meeting site for Friday and Saturday evenings.

Winter board meeting: Dec. 6 — Dunn-Palmer Herbarium in Columbia, Mo.

Tentative plans also have been made for 2009, where we may travel to southeast Missouri in the spring to visit and explore with members of the new Perennis Chapter in that area. Also, tentative plans have been made for a reciprocal field trip with the folks from the Arkansas NPS to see Mead's milkweed in our southwestern Missouri prairies in late May.

In addition, 2009 will be the 30th anniversary of the Missouri Native Plant Society, and we will be doing something special to commemorate that occasion.

Osage Plains chapter honors native flora enthusiast

By Emily Horner

Osage Plains chapter representative

Dale Jennings of Cole, Mo., was awarded the Blazing Star Award on Nov. 19 by the Osage Plains Chapter of the Missouri Native Plant Society for his work and that of his family to promote the enjoyment, preservation, conservation, restoration, and study of the flora native to Missouri.

For Dale, this interest in nature began during his youth in a large family on a farm near Crocker, Missouri and continued as his wife, Irene, raised their own family in Richland and Lebanon.

Dale always expressed a strong attention to native plants and wildlife. Dale related changes in nature over time and location particularly that quail populations were abundant during his youth and his early married life. He recognized the decline in quail populations over time as the introduced forage, fescue, became widespread and predators were abundant. Their family consumed berries and "greens" that grew around their farms as well as fished and hunted wild game.

In 1995, Dale and his second wife, Ruth, moved to their present home north of Cole on Highway 7 and since that time have planted thousands of seeds and live plants of many native flowers. This great diversity of plants and beautiful displays of blooms are evident all year and are enjoyed not only by Dale and his family, but of the many people traveling on Highway 7. Dale also brings fresh cut bouquets to Sunday school, Osage Plains MONPS meetings to other places. Dale also continues an annual dinner and tour of the native plants on his property for the Osage Plains Chapter of the MONPS.

Dale has learned a lot through his experiences. He notes that people expect native broadleaf plants to germinate, grow and bloom the year of planting, but this may not be the case. These plants have different growth habits which are also regulated by climate. He mentioned his experience with a planting of butterfly



Emily Horner, Osage Plains Chapter president, presented Dale Jennings of Cole, Mo., with the Missouri Native Plant Society's Blazing Star Award on Nov. 19.

bush and blazing star that required four years to bloom. Most people would have considered this a failure to have waited four years for results; but this is a success.

He also notes that planting of native plant seed is good on a prepared seed bed in February; hoping nature will contribute to plant development.

It is evident, that Dale Jennings has promoted the enjoyment, preservation, conservation, restoration and study of flora native to Missouri throughout his busy life. The Osage Plains Chapter is proud to have had Dale and Ruth as members for many years.

Longtime MONPS supporter publishes another book

By Chuck Robinson

A longtime friend of the Missouri Native Plant Society has a new book out published by Timber Press.

Barbara Perry Lawton's new book is "Parsleys, Fennels and Queen Anne's Lace: Herbs and Ornamentals from the Umbrel Family."

For many years she was editor and publications manager for the Missouri Botanical Garden and a weekly garden columnist for the *St. Louis Post Dispatch*. She also has authored "Hibiscus: Hardy and Tropical Plants for the Garden", "Magic of Iris" and "Mints: A Family of Herbs and Ornamentals."

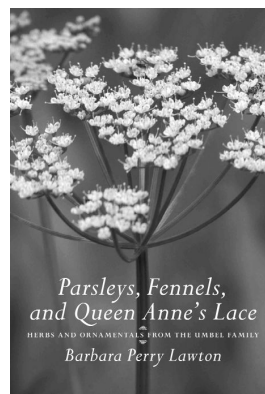
Lawton took part in the founding of the Missouri Native Plant Society in 1979. Also, in her new book she acknowledges

the help of MONPS leading citizens Kay and George Yatskievych.

"Parsleys, Fennels and Queen Anne's Lace" isn't a book on native plants, though a few are listed. About half the book is devoted to a listing of umbrels, which are cousins of carrots and parsley and other members of the family Apiaceae.

Before the listing, however, are chapters touching on the plant family's history, lore, medicinal importance and culinary uses.

While the book does not dwell on native Missouri plants, it doesn't avoid them either.



For instance, the author tells us about wild chervil, *Chaerophyllum procumbens*, a spreading annual herb with a taproot and finely divided leaves, it can be found on moist forest floors.

The book also takes note of *Erigenia bulbosa*. Its compound umbrel of flowers are among the first native wildflowers to bloom in Missouri. The stems have a reddish cast and the leaves a rich mid-

green, Lawton says. While the basal leaves are divided into narrow segments, the upper leaves are ternately or triternately divided.

New chapter forms in Missouri's Bootheel

A new chapter was welcomed into existence at the Missouri Native Plant Society's Dec. 3 board meeting.

The group has chosen Perennis as its name. It is a Latin term that is the root of the English word perennial. Inspiration to use it as a chapter name came from the specific epithet in the scientific name of swamp milkweed, *Asclepias perennis*, found in alluvial soils in Missouri's Bootheel area, explains the first newsletter of the then-provisional chapter, published in November.

On Nov.14, 10 native plant enthusiasts converged on River Ridge Winery outside of Commerce, Mo., to plan the establishment of a chapter of a Missouri Native Plant Society chapter in southeast Missouri.

Two members from the Illinois Native Plant Society attended the meeting and expressed great interest in joining the chapter across the Mississippi River. Several existing members of the society were unable to attend the meeting but expressed excitement in forming a chapter for the region.

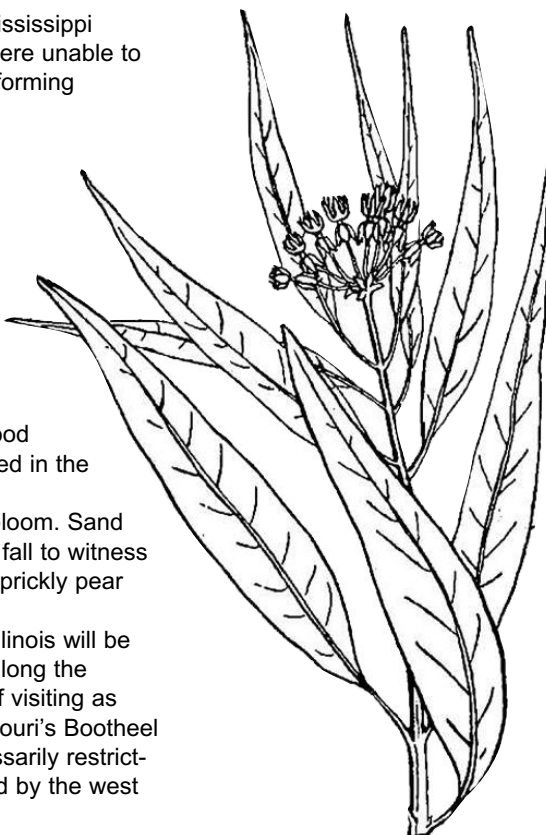
Over dinner, field trip options for a southeast Missouri chapter were discussed.

While it was noted that the statewide meetings often bring society members to Mingo National Wildlife Reserve and Duck Creek Conservation Area, other sites of equal biological importance were discussed. The stream banks of Holly Ridge Conservation Area and Morris State Park, both areas rich with ferns and mosses, will be visited in the fall to catch beech drops and *Platanthera ciliaris* in bloom. Bottomland hardwood swamps of Illinois and Missouri will likely be visited in the spring or summer to see *Asclepias perennis* and *Trepocarpus aethusae* (among many others) in bloom. Sand prairies will be visited in the spring, summer and fall to witness the diverse, relictual flora ranging from tickseed, prickly pear cacti to jointweed.

The steep river bluffs of Cape Girardeau and Illinois will be explored in the summer months. Several areas along the Cache River in Illinois were determined worthy of visiting as well. While most interested members live in Missouri's Bootheel and southern Illinois, field trip sites are not necessarily restricted to the area south of Cape Girardeau, bounded by the west by Crowley's Ridge.

In preparation for the provisional meeting, invitations to the organizational meeting were sent out to nursery owners and current MONPS members. PowerPoint slide shows extolling the virtues of native plant gardening were presented to four area garden clubs. As a direct result of one of these presentations, the Sikeston, Mo., Parks Department is installing a native plant bed in the heart of downtown Sikeston, an area undergoing revitalization. Members of the provisional southeast Missouri chapter anticipate encouraging local nurseries to offer native plants for sale and encourage the incorporation of natives in other civic plantings.

Members interested in joining the southeast Missouri chapter should contact Kent Fothergill at kent@csr-inc.com or Allison Vaughn at allisonjv@yahoo.com or (573) 703-6448.



Asclepias perennis:

- Leaves opposite, with short petioles. They are narrowly lanceolate or narrowly elliptic.
- Found in swamps, sloughs, bottomland forests, margins of ponds and lakes and occasionally on banks of streams.
- Inflorescences are terminal and in the upper leaf axils short- to long-stalked and with 8-25 flowers.

Source: Steyermark's *Flora of Missouri*, Volume 2.

INFORMATION ON JOINING THE MISSOURI NATIVE PLANT SOCIETY

SOCIETY DUES

(Chapter dues additional)

Student dues\$5
Regular\$10
Contributing\$20
Life\$200

CHAPTER DUES

Columbia\$6
Kansas City\$5
Osage Plains\$5
St. Louis\$5
Ozarks Native Plant\$5

(Circle all above that apply)

Do not publish my name and address in the membership list.
 \$_____ Contribution for student research award (Hudson Fund)

*** All contributions are tax deductible ***

Make checks payable to Missouri Native Plant Society

Mail to: Missouri Native Plant Society

P.O. Box 20073

St. Louis, MO 63144-0073

Name: _____
 Street: _____
 City, state: _____
 9-digit ZIP: _____ Phone: _____
 E-mail: _____

Hawthorn Chapter

Submitted by Judy Turner, chapter representative

Let me start with an update on our activities in October.

Our hike on the Shooting Star Trail was delightful, especially the view from the bluff top of the trees beginning to change colors. The following weekend a small group traveled down to the Spring Gap Conservation Area in Maries County. Both of these hikes were followed by a relaxing lunch with good company at a local eatery.

One other major activity scheduled for October was to be our participation in the 5th Annual Chestnut Roast. We were there, but it rained before it ever got started and never really quit raining. We not able to set up our booth, but some of us braved the rain and attended some of the activities.

November started off with a cookout at the Ellifrit's spread on Cedar Creek. This is becoming an annual affair and is always enjoyed by all — except for the Cornish game hens we roasted and consumed! Later in the month we met again out at the Ellifrit's for the cedar wreath workshop.

Our regular program meeting was quite educational.

Doctoral candidate Shane Pruett presented information from his research in southeast Missouri bottomland "pocket" forests and plantation forests of cottonwood, sycamore and green ash.

He compared the nesting habitats and success of three species: indigo bunting, acadian flycatcher and prothonotary warblers. The purpose of the study was to determine whether nesting success was higher in the native forest with trees of different ages or in the pulp forest where all trees are the same age, the same size, and the same species.

Buntings, which nest in low, brushy areas, did very well on the plantations because there was a great deal of understory growth. Flycatchers, which nest higher and fly out from strategic branches to catch insects on the wing, did better in the native forest. The warblers were seen but were not numerous enough to reveal a definite pattern.

Surveillance cameras showed many predators — some to be expected, such as the black rat snake, and some surprises, such as red-bellied woodpeckers and a white-tailed deer.

Our monthly lunch get together of native plant enthusiasts was again quite well attended. We're not sure if it's the new location, the food, the conversation, or the participants. Or all of them! Whatever it is, we'll keep doing it.

During October and November, various members have continued to collect native wildflower and grass seeds to be used in the restoration along Stadium Blvd. We should be able to cover about 80% of the area we previously cleared. Seed scattering was planned to commence on Dec. 16, weather permitting. Other activities planned for December include our annual holiday party and another monthly luncheon.

Kansas City Chapter Report

Submitted by Daniel Rice, chapter representative

The Kansas City Chapter had a great meeting in November, discussing the different aspects of prescribed burns.

Several members have much experience in prairie burns, as they are restoring their properties in Cass County Missouri.

One of our new members has just purchased some acreage and is very interested in learning the do's and don'ts of burning. It was quite interesting and fun walking her through the various steps from preparing the fire lines, to the final result. Of course, there were several personal experiences of what can go wrong during a burn, but that is all part of the learning experience.

We also discussed the new baseball caps, set the slate of candidates for our election in January, and had a very good discussion concerning web sites. All in all, it was a great meeting.

Our next chapter meeting will be on Jan. 17 at the Discovery Center in Kansas City. This is the meeting at which we will set the field trip dates for the coming year, and elect our Chapter Officers. The meeting starts at 7 p.m., and everyone is welcome.

Osage Plains Chapter

Submitted by Marlene T. Miller, chapter representative

At our Oct. 15 meeting we had a hands-on learning project instead of a speaker. We also branched out a bit from plants to birds. After all, birds do "plant" many of the seeds that later grow into plants so we felt we were not too far from the mark.

Two of our members brought suet recipes, and one of our members prepared small hanging cedar logs for receiving the suet offerings. We had a great time preparing, mixing and mixing. I don't believe we really followed any of the recipes exactly, but I bet the birds aren't even noticing. We poured our concoctions into pans and cooled them while we had our meeting. At the end of the evening, we each got about a half pan of suet and a cedar log to take home.

After sharing some wild refreshments such as persimmon bread and rose hip tea, we had our meeting. Marlene gave a report from the state society. She will pick up any orders of books, ball caps etc. at the December Board Meeting so orders and money is to be brought to the November meeting.

We again discussed the Peterman property of 38 acres up for sale at \$3000 an acre but came no closer to finding a solution for a way to protect the property in its present native state. We received a final list of the plants that were identified on the Mohr property when we had our field trip there.

We made discussed awards and made assignments of tasks for the presentation.

Our next meeting was held Nov. 19. Mary Lou Philpott from Sharp Brothers Seed spoke to the group on some general points regarding native plants and using them in your home landscape. She showed pictures of 11 plants that can be used. After discussing their characteristics, she gave us ideas of where they would work best in your landscape.

After our refreshment and visiting time, we presented Dale Jennings with the Blazing Star Award for his interest in native plants all of his life and the last few years of dedication to the propagation of those plants on his property. He gladly shares information, seed, and a lifetime of learning with anyone who will take the time to listen. Every year in July, he and his family invite the Osage Plains Chapter to the farm for a meal and a tour of the wonderful blooming plants.

During our meeting we began planning for next year. We shared ideas for field trips, programs, etc. Marlene will start the

year off in February with a program on the history of native plants in Hawaii accompanied by photographs from her recent trip.

There are no meetings or field trips in December or January. The next meeting will be Feb. 18 at 7 p.m. at the Clinton office of the Missouri Conservation Department.

Ozarks Chapter

Submitted by Susan Farrington, chapter representative

At our late September field trip to White Ranch, we visited a prairie fen and observed lady's tresses (*Spiranthes magnicamporum*), false foxglove (*Agalinis fasciculata*), New England aster (*Symphotrichum novae-angliae*), and blue lobelia (*Lobelia siphilitica*) were among the native plants we found. We hope to plan a field trip to return during the second week of July next year because we observed an impressive number of finished stalks of prairie blazing star (*Liatris pycnostachya*).

Plans are being made to make a book presentation to the West Plains Public Library during one of our first meetings in 2008.

Members are being asked how they feel about alternate sites for meetings such as the new Twin Pines Heritage Center that is Melanie's new base. Would a short field trip instead of a regular meeting work (with Daylight Savings Time taken into consideration)? We would like to broaden the membership without losing the base we have found in West Plains.

At our October meeting, several people brought plants to be identified and we had a great time seeing what each had found to bring. Pat French brought up on the big screen Dan Tenaglia's marvelous web site for plants: www.missouriplants.com, which includes photographs, descriptions and keys to the flowering and nonflowering plants of the state, categorized by flower color and/or leaf characteristics.

St. Louis Chapter

Submitted by Martha Hill, chapter representative

Our annual members' meeting was Wednesday, Oct. 24, when several people gave slide and PowerPoint presentations of noteworthy experiences with their cameras.

Pat and Jack Harris had some from their recent Orchid Conference trip in Florida. Ariel Buback had some excellent flower close-up photos. Steve Turner had some wonderful pictures of unknown flowers for which he was seeking identification. Retha Edens, now Meier, had pictures from a recent honeymoon trip out west. John Oliver had pictures that we were to ignore from Hawaii and from Europe, where he went to celebrate Linnaeus' 300th birthday, along with a bunch of his excellent Missouri photos where he, as usual, shamelessly advertised his website, <http://community.webshots.com/user/oliverjcomo>. Finally, Rex and Martha Hill showed photos of this year's trip to Great Basin National Park, where they traveled to see the ancient Bristlecone Pine stands.

The Whitney and Anna Harris Conservation Forum 2007 took place at the St. Louis Zoo on Nov. 8 to give information to the public about the Missouri Ozark Forest Ecosystem Project. Several MONS members from the St. Louis area were present for talks (some concurrent workshops) that gave information on the effort being made to examine the ecosystem response in relation



Steve Buback implores the masses to attack bush honeysuckle in Forest Park.



Bristlecone Pine (*Pinus longaeva*) — some of which are upwards of 4,600 years old.

to three forest management types. The different styles were: even-aged management, uneven-aged management and no management. Speakers gave information and statistics relating to absence/presence of birds, mammals, plants, insects, reptiles, amphibians, and other invertebrates before and after the area was managed (or not managed).

On Saturday, Nov. 10, the local Forest Park Forever coalition sponsored another effort at honeysuckle removal in one of the last remaining areas where this shrub is abundant in Forest Park. Steve Buback, who is one of our St. Louis members and who is on staff there, manages the site and coordinated the effort. Rex and Martha Hill were there for the morning shift, along with about 98 other like-minded anti-honeysuckle people. It was a huge effort and we commend Steve for his hard work and determination in getting this invasive plant under control in our beautiful park. He tells us that the staff will go around again in the spring and cut/spray remaining limbs and sprigs that return.

Botanical Inquiry

By Retha Meier

Why are yellow lady's slippers not that common in Missouri?

The yellow lady's slipper, *Cypripedium parviflorum*, is not common in Missouri for a number of reasons. Reasons include habitat destruction, unauthorized transplantations and pollinator limitation.

As more and more habitats are destroyed, so are the wildflowers, including the yellow lady's slipper orchids. Construction of roads and buildings, as humans encroach upon nature, results in fewer and fewer woodland areas. Logging also has an effect on decreasing the natural populations of the yellow lady's slipper orchids.

When I began studying the yellow lady's slipper orchids in 2004, an initial major hurdle was finding populations of these flowers to study. People who knew where they were growing were reluctant to share this information, and for good reason. Members of the Department of Conservation at Meramec State Park, once permits were obtained, led me to several sites. David Schilling walked me to the orchid populations at St. Francois State Park and told me where the large group of 30 flowering stalks was located at Hawn State Park. As I networked among people living in these areas, I saw two homes where the yellow lady's slipper orchids had been dug up from the wild and transplanted in their own flower beds. Not only is this a bad idea, it's illegal.

Thousands to millions of tiny seeds are released from each seed pod — that is if the flower is pollinated. One would assume that a significant number of these seeds would find their way to the soil and germinate. One wonders how many seeds actually make contact with the soil because of the thick leaf litter in most areas. The seeds successfully reaching the soil must make connections with a certain fungus in order to germinate. In addition, young plants can remain underground for years before emerging. One day, while at St. Francois State Park, I saw a little girl picking wild flowers along the trail. If she had picked a yellow slipper, she would have removed about a million seeds from the environment.

In Missouri, the yellow lady's slipper orchids bloom during late April/early May. These populations typically grow in Missouri's woodlands, and are, for the most part, sparse. Other flowers that could serve to attract pollinators growing in near proximity to the yellow lady's slipper orchids are not that abundant. This means that there is not a huge attraction to the area for the pollinators.

Yellow lady's slipper orchids are "pollinator limited," which means that there are low levels of pollination. Although the bright yellow color and alluring fragrance attract pollinators, the flowers offer no rewards. Pollinators soon "learn" that the trek through the slipper-shaped labellum is just not worth it.

In summary, habitat destruction, unauthorized transplantation and pollinator limitation are reasons why the yellow lady's slipper orchids are not common in Missouri.



Retha Meier

Yellow lady's slipper, *Cypripedium parviflorum*

■ If you have suggestions for future Botanical Inquiry subjects, e-mail [rmeier2 @slu.edu](mailto:rmeier2@slu.edu).

MONPS class looks at Missouri's natural areas

For more than 30 years, areas of Missouri have been set aside as being representative of the state's best geological, biological, and ecological diversity.

These areas — more than 180 by now — are acquired, managed and protected by a cooperating consortium of public and private agencies and individuals and are made known and available to Missouri's citizens to visit and appreciate.

Join us to learn more about where these areas are located and why they have been included in this designation and experience several of them on two field trips.

The lecture portion of the class is scheduled 7-9 p.m. Thursday, April 24 at Meramec Community College.

Field trips are planned 9 a.m. to noon on two Saturdays: April 26 at Engelmann Woods and May 3 at Pickle Springs and Hickory Canyon.

The cost for the class is \$28. Registration opens Jan. 2 at 8:30 a.m.

Register online at <http://users.stlcc.edu/conted/>. The course number is NATR 723 600.

The class is sponsored by Missouri Native Plant Society and meets curriculum requirements for the master naturalist certificate offered by St. Louis Community College.

Shaw Nature Reserve plans Native Plant School

The Shaw Nature Reserve plans a series of Thursday afternoon classes known as the Native Plant School.

The three-hour programs are planned to begin in 2008 with a Feb. 14 presentation on "Control and ID of 'The Worst' Invasive Woody Plants.

On March 13, a program on "Native Plant Propagation from Seed" is scheduled.

On March 27, the planned program is titled "Native Landscape Planning, Planting and Maintenance."

The cost is \$8 for members of the Missouri Botanic Garden and \$12 for non-members. Call the Shaw Nature Reserve at (636) 451-3515 to reserve a seat. Fees will be paid at the Shaw Nature Reserve Visitor Center on arrival.

New species of lichens found in the Ozarks

Three new species of lichens and a species of fungus have been found in Missouri's Ozarks region.

The discoveries were the fruit of a 10-year study of Ozarks lichens conducted by the Nature Conservancy and the New York Botanical Garden.

Doug Ladd, director of conservation science for the Nature Conservancy in Missouri, recently authored a paper describing the new species with Richard Harris, researcher with the New York Botanical Garden.

The three genera and species of lichens are *Pachyphysis ozarkana*, *Pheopbus hydrophobias* and *Xyleborus sporodochifer*. The fungus is *Operographa diffractiola*.

Lichens are combinations of a fungus and algae or algaelike bacteria. The relationship between the fungus and algae is

complex and not well understood. Even basic taxonomic and floristic work remains incomplete. Ladd has been involved in rectifying this for years.

In general, lichens take their form from the fungus, within which can be found pockets of algae. The fungi are fed by the algae, which photosynthesize food.

Lichens are informally classified by growth form, and there are three readily identifiable forms. The new discoveries are crustose lichens. Crustose lichens look like thin crusts on rocks, trees, fence posts, shingles and old iron bridges.

More common are the foliose lichens, the ruffled green or gray lichens often found on trees and rocks.

The fruticose lichens are more three-dimensional, like tiny shrubs, such as old man's bear or reindeer lichens.

For more information on lichens:

■ Go to "Lichenland" for a general overview from Oregon State University at www.ocid.nacse.org/lichenland

■ Find another general overview at www.backyardnature.net/lichens.htm.

■ The book "Lichens of North America" by Irwin M. Brodo, Sylvia Duran Sharnoff and Stephen Sharnoff and published by Yale University Press came out in 2001.

An associated web site is at www.lichen.com



Missouri's wild dill data needs to be updated

Please keep an eye peeled this spring for wild dill, ask plant trackers maintaining the Missouri Heritage Database.

In Missouri, more data is needed to determine if wild dill, *Perideridia americana*, is imperiled. The distribution map of the plant in Missouri shows reports from 39 counties, but most of the records are at least 25 years old. Only eight records are considered extant, or in good standing, and they show wild dill in only five counties.

While *Perideridia americana*'s distribution in Missouri is under question, it is considered critically imperiled in Kansas, Oklahoma, Mississippi and Indiana and imperiled in Arkansas, Kentucky and Tennessee.

Wild dill's global ranking is G4, "apparently secure," which means it is uncommon but not rare.

Recent Missouri collections indicates the flowering period is from late May through mid-June.

The plant grows up to 4 feet tall. The tall stems end in compound umbrells with small white flowers. A typical umbrel measures 6 inches across and has a dozen umbellets that are loosely arranged. The alternate compound leaves are sparse. They are doubly pinnate, about 8 inches long and 4 inches wide. The slender leaflets are an eighth inch wide.

After blooming, wild dill fades away and becomes dormant for the remainder of the year.

Find wild dill in upland prairies, mesic to dry forests, cliffs and glades. Most forested sites appear to be partially open, shallow-soiled areas such as near glades, cliffs or roadsides.

According to John Hilty's web page, www.Illinoiswildflowers.net, wild dill resembles wild carrot (*Daucus carrot*) but the slender leaves of the wild dill give it away as does the bloom time — wild carrot blooms in early summer, not spring. Wild dill should not be confused with cultivated dill, *Anethum grave-*



Wild dill, *Perideridia americana*, is considered critically imperiled in several of Missouri's neighboring states.

olens, the familiar annual Old World herb with yellow flowers.

A common name for *Perideridia americana* is "thicket parsley."

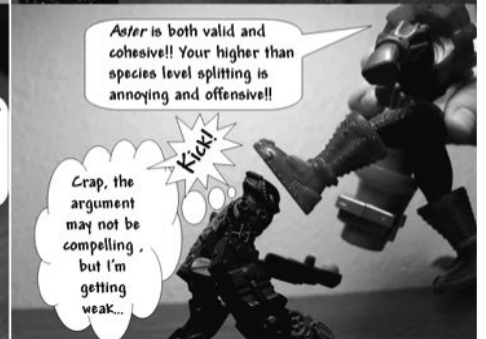
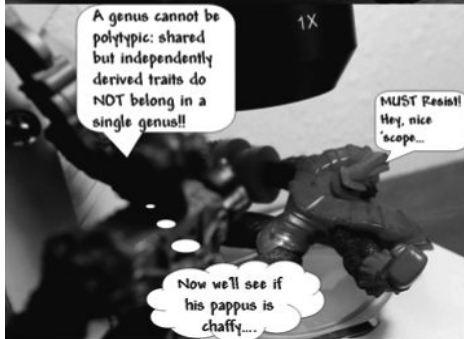
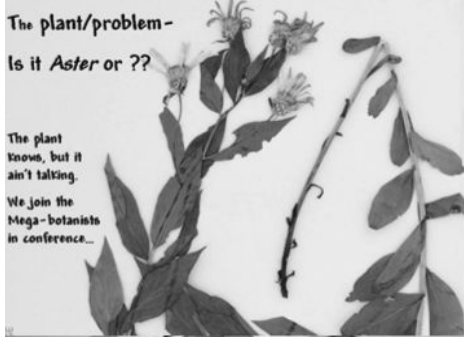
The Missouri Natural Heritage Program identifies species and natural communities of conservation concern in each Missouri county.

In 1981, the Nature Conservancy, Missouri Department of Natural Resources and Missouri Department of Conservation created the Missouri Natural Heritage Program to identify species and natural communities of conservation concern in Missouri.

Since 1983, the Missouri Natural Heritage Program has been part of MDC, where it continues its strong commitment to conserving rare and endangered plants and animals and high-quality natural communities. The Missouri Natural Heritage Program receives biological data from the Missouri Natural Features Inventory, field biologists, universities, scientific literature, herbaria and other individuals and organizations.

Mega-botanists the World over are embroiled in a controversy of the highest order with the future of the entire human race hanging in the balance....

Battle over genus ASTER



Some days botany just doesn't pay... I will DIE first! You have no Truth!!

I understand... But shouldn't taxonomy serve people?

CLANG!!!

And so began the super-mega-botanist friendship friends - stay tuned...

By Kent Fothergill, Perennis chapter

Quarterly Board Meeting

**By Ann Schuette
Secretary**

The following notes were taken at the Sept. 15 board meeting of the Missouri Native Plant Society in Camdenton, Mo.

Treasurer's Report — Bob Siemer reviewed the Treasurer's reports for both the fiscal year ended June 30, and the current quarter through Sept. 15. Both had been e-mailed before the meeting to board members. Bob noted that we are in good financial shape for the coming year. Investments have grown and due to more members becoming life members, the earnings from these may be needed in future years for operating funds. Bob noted that the reduced cost of the *Petal Pusher* distribution due to Bill Knight's efforts has helped the financial position. Bob will change this fiscal year title from 2007 to 2008. Ann Schuette will look into the requirement that we file a federal tax return and communicate with Bob.

PUBLICATIONS & MEDIA

Distribution Chairman's Report — Bill Knight reported that the rebate on printing has been reduced from 15% to 10%.

Publicity Chairman — Kevin Bley noted that Blazing Star Award nominations had been received only from the St Louis chapter. He requested other chapters to make recommendations. Judy Turner noted that she attempted to download the form from the MONPS website, but could not find them. As of now, the forms are not available on the website. Chapter representatives will need to request blank forms to be filled in by hand or send the names to Bley and he will print out the completed form. Notice of all recipients should be sent to the *Petal Pusher* and Bley so that he may keep a record of all those who receive the award. It was also noted that when the award is made, it would help our visibility, if it could be put in the local paper(s), their newsletter and in the *Petal Pusher*.

MONS website — Rex Hill stated that there are continuing problems with the current website and that we need a webmaster who has the time and interest in developing the site. Dan Rice said that the current vice president of the Kansas City chapter — Dave Winn — might be willing to take the job. Hill said he would contact him and see if he would be willing to take on the webmaster job and the transition from the University of Missouri to another server, if necessary.

Missouriensis — Last year's edition has been sent to the printers and will be distributed in the near future. Rex Hill mentioned that any new information for this year's edition should be sent to George Yatskievych. Paul McKenzie noted that Yatskievych was concerned with the lack of input from members. A discussion was held on possible topics of articles for the next issue. Hill encouraged all members to submit articles for publication and suggested everyone e-mail ideas to George Yatskievych.

COMMITTEES & TASK FORCES

Membership stats — Ann Earley's report stated that there are 339 members, including 44 life members. Since the June meeting 14 new memberships have been received.

Archives — Jack Harris said we now have a complete set of minutes, *Missouriensis*, and newsletters. They will be on file at the Missouri Botanical Garden. Rex Hill thanked Jack for all his work.

Nominating Committee — Rex Hill asked if anyone would be willing to serve as chairman. The two members going off the board would need to be contacted to see if they would want to be renominated. If not, new members would need to be found.

SOCIETY BUSINESS

Ball Caps — Pat Harris related that 125 ball caps had been ordered. They will be

khaki with a green bill and cost about \$10. Distribution will be determined later.

April Meeting with Arkansas Native Plant Society — A joint meeting in Arkansas no more than one hour from Missouri the first or second weekend in April 2008 was discussed. It was determined that either weekend would be OK with our chapter and the Arkansas chapter could make the decision on the date. The reciprocal meeting will be in June 2009 somewhere among the southwest Missouri prairies.

30 Year Anniversary in 2008 — RH reminded the board that our 30th anniversary will be next year. He suggested that the annual meeting in June be oriented toward the anniversary and that suggestions be submitted.

MISCELLANY

Jack Harris commented on the LaBarque Creek class he and Nels Holmberg were leading at Meramec Community College. Jack also commented on the new power line alternatives through the watershed proposed by AmerenUE. The landowners have requested that MONPS send a letter supporting the least intrusive option. After discussion, SF made a motion, seconded by Bruce Schuette, that Rex Hill will confer with George Yatskievych about a letter endorsing the least intrusive option on behalf of MONPS to AmerenUE. RH said he would also provide a follow-up article for the *Petal Pusher*.

Paul McKenzie let the Society know that he was on the Taum Sauk power plant interagency committee and that AmerenUE would be going through relicensing to rebuild the reservoir in the same location.

Tim Smith stated that big bluestem is now the official grass of Missouri. He also will coordinate and gather information about new sightings of *Agalinis auriculata* in the state for submission to *Missouriensis*.

New members of the Missouri Native Plant Society

Del & Cherry Taber, Pomona, Mo.
Nancy Langworthy, Rocheport Mo.

Margaret Keister, West Plains Mo.
Evelyn Vetter, Pomona Mo.

Betsy Windmiller, Columbia, Mo.
Priscilla Farrall, Austin, Texas

Missouri Native Plant Society
P.O. Box 20073
St. Louis, MO 63144-0073

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Inside This Issue:

- A new chapter has formed in southeast Missouri.
- A Blazing Star Award goes to a Cole, Mo., native plant enthusiast.

Missouri Native Plant Society Officers and Board Members

PRESIDENT

Rex Hill
4 Grantwood Lane
St. Louis, MO 63123
314-849-1464
rexhill@earthlink.net

VICE-PRESIDENT

Tim Smith
1704 W. Main
Jefferson City, MO 65109
573-635-8085
Tim.Smith@mdc.mo.gov

SECRETARY

Ann Schuette
303 Spring Church Rd.
Troy, MO 63379
636-528-6544
basch@centurytel.net

TREASURER

Bob Siemer
74 Conway Cove Drive
Chesterfield, MO 63017
636-537-2466
aee623@prodigy.net

IMMEDIATE PAST PRESIDENT

Kathy Thiele
4 Rodelle Woods
Weldon Spring, MO 63304
636-300-9290
thiele6330@aol.com

BOARD MEMBERS

James C. Trager, Ph.D. ('05-'08)
Shaw Nature Reserve
P O Box 38
Gray Summit, MO 63039
636-451-3512, Ext. 6002 (w)

Paul McKenzie ('06-'09)
2311 Grandview Circle
Columbia, MO 65203
573-445-3019
paul_mckenzie@fws.gov

Robin Kennedy ('05-'08)
University of Missouri Herbarium
Columbia, MO 65211-3170
573-882-6519
umoherb@missouri.edu

John Oliver ('07-'10)
4861 Gatesbury Dr.
St. Louis, MO 63128
314-487-5924
joliver02@earthlink.net

Bruce Schuette ('07-'10)
678 St. Rt. 147
Troy, MO 63379
636-528-7247 (w)
basch@centurytel.net

Sherry Leis ('06-'09)
533 S. Forest Ct.
Springfield, MO 65806
660-885-6981 (w)
prairienut@hotmail.com

ARCHIVES

Jack Harris
9708 Green Park Rd.
St. Louis, MO 63123
314-368-0655

ENV. AND EDUC.

John Oliver
(see board members)

FIELD BOTANY

Tim Smith
(see officers)

MEMBERSHIP

Ann Earley
1425 Bobolink Pl.
St. Louis, MO 63144-1128
314-963-0103
aee623@prodigy.net

PUBLICITY

Kevin Bley
4 Zinzer Ct.
Grantwood Village, MO 63123
314-544-3692
bley435@yahoo.com

**MISSOURIENSIS,
CO-EDITORS**

George Yatskievych
MO Botanical Garden
PO Box 299
St. Louis, MO 63166
314-577-9522 (w)
george.yatskievych@mobot.org

Doug Ladd
The Nature Conservancy
2800 S. Brentwood Blvd.
St. Louis, MO 63144
314-968-1105 (w)

**PETAL PUSHER
EDITOR**

Chuck Robinson
6911 NW Blair Rd.
Parkville, MO 64152
chuckrkc@kc.rr.com

DISTRIBUTION MGR.

Bill Knight
5101 Dresden Ave.
St. Louis, MO 63116
314-832-7081
knight-bill@sbcglobal.net

EDITORIAL COMM.

David Castaner
Paul Redfearn
Tim Smith
Stephen L. Timme

**CHAPTER
REPRESENTATIVES**

HAWTHORN
Judy Turner
jtejasrgv@yahoo.com

KANSAS CITY

Daniel Rice
815 W. 31st St.
Independence, MO 64055
816-461-0206
Drice95875@aol.com

OSAGE PLAINS

Marlene Miller
949 NE Hwy C
Calhoun, MO 65323
660-694-3581
jwmiller@dishmail.net

OSARKS NATIVE PLANT

Susan Farrington
MDC Ozark Regional Office
551 Joe Jones Blvd.
West Plains, MO 65775
417-255-9561 Ext. 307 (w)
Susan.Farrington@mdc.mo.gov

ST. LOUIS

Martha Hill
4 Grantwood Lane
St. Louis, MO 63123
314-849-1464
marthahill@earthlink.net



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Ironweed adds a purple punch to fields

By Chuck Robinson
Petal Pusher editor

The flat purple heads of Missouri ironweed add a particularly pleasing aspect to fall, my favorite of seasons.

You can spot them in open fields and along roadways. The flower packs a big purple punch and keeps delivering when summer's heat has gotten to most other plants. It rivals the rich hues of horticulturally enhanced mums in garden center fall sales, and it waves tall enough at 4 feet or so that it gets noticed from a distance. Each mostly unbranched stalk serves up a broad platter of flower heads.

Ironweeds are part of the aster family. While many of its familial relations have straplike ray or ligulate flowers, ironweeds have only disc florets, like the fuzzy yellow centers of daisies, except purple.

The Missouri ironweed, *Vernonia missurica*, tends to favor the eastern part of the state. Edgar Denison's *Missouri Wildflowers* tells us it is also called Drummond's ironweed. Look for it in damp areas. It is very hairy and saves its blooming energy for late summer and fall. It has 32-60 disc florets per stem.

Another ironweed blooms earlier and is more widespread in the state, according to George Yatskevych's revised edition of *Steyermark's Flora of Missouri*. Vol. 2, Baldwin's ironweed blooms earliest of the ironweeds, blooming from May to September. Denison says to look for *V. baldwinii* in waste areas, along roads, field and glades. Bless its little plant soul, it grows in most any soil type and in mesic to dry conditions — drier than its ironweed cousins.

V. baldwinii also goes by Western ironweed in the revised *Flora*.

The maps in the revised *Flora* depicting the verified distribution of a plant shows dots representing the *V. baldwinii*'s spread in 93 of Missouri's 114 counties, with dots getting sparse in southeast Missouri's bootheel and the northeast quadrant of the state. By comparison, there are county dots for *V. missurica* in only half of the counties.

Besides the bloom time, which overlaps considerably, you can tell these two ironweeds apart by the size of the flower heads — the Missouri ironweed has 30-55 disc florets and Baldwin's has 15-30 florets. The Missouri ironweed likes moister environs than Baldwin's ironweed, tending more toward stream banks and fens.

A key identifying characteristic are at the base of the flower-head, where on Baldwin's ironweed the green bracts curl out. On the others, except for *V. arkansana*, the bracts lay flat.

The bracts on *V. arkansana* are not just recurved, but curly. After all, it is commonly known as curlytop ironweed. It is also known as Southern, Arkansas or Ozark ironweed.

V. arkansana stays south of the Missouri River in the Ozark regions of the state. You can find it gravel and sand bars along streams, at the edges of sloughs, wet meadows, thickets, open woods, prairies and glades. It has willow-like leaves and large flowering heads from July through September.

The Ozarks ironweed is available to gardeners from Missouri Wildflowers Nursery in Jefferson City. Each flower head is a



Vernonia baldinii has distinctive curled bracts.

small purple pompon, bigger than the florets of the Missouri or Baldwin's ironweeds. Owner Mervin Wallace only rates the curlytop ironweed two stars out of four, but knows the purple flowers will have gardeners lining up for the plant. He says it is a sizeable plant for the backs of beds and rain gardens. He suggests it may not be a front-yard plant all by itself.

There are three other ironweeds found in Missouri. *V. gigantea*, tall ironweed, grows up to 8 feet tall or so. Again, it likes medium to wet soils.

There also is *V. fasciculata*, with shiny, glabrous leaves, which is found in wet prairies, marshes and areas that periodically get briefly flooded. It is found north of the Missouri River, mostly, and in the western part of the state. It can get 6 feet tall, but more normally grows to 4 feet.

Cattle tend to leave ironweed alone. The revised *Flora* says ironweeds contain toxins, though no livestock deaths have been attributed to them.

The revised *Flora* also warns that North American ironweeds are notoriously promiscuous, meaning there is quite a bit of cross-pollinating going on and a lot of hybrids.

The common name "ironweed" may have been drawn from the gray cast of the plant's color because of its fuzzy stems and leaves. The Missouri Botanical Garden web site suggests the ironlike, tough constitution of the plants or the change of the flowers to rust-colored seed heads as reasons for the common name.

The genus *Vernonia* commemorates William Vernon, an English botanist who collected in Maryland in the late 1600s and died in 1711, according to the *Flora of North America North of Mexico*, provided online by the University of Maryland.

V. baldwinii commemorates the original collector of the plant, William Baldwin, who lived 1779-1819. He was botanizing in Georgia and Florida when he was appointed botanist on the expedition of Major Stephen H. Long to the Rocky Mountains, according to Harvard University Herbaria. He left with the expedition in March 1819 but his health deteriorated and he died in Franklin, Mo., in 1819.