



## Dues are Due: See paragraph on page 6.

TURN SCREEN TIME TO GREEN TIME



### CHAPTER

#### Kansas City Chapter

*Submitted by Hilary Haley, KC Chapter Representative*

On April 27<sup>th</sup> the MONPS KC Chapter took a field trip to the Martha Lafite Thompson Nature Sanctuary, located in Liberty, MO. This private, non-profit nature sanctuary is bordered by Rush Creek and is known for its Woodland Trail which boasts a variety of high quality spring ephemeral wildflowers. We practiced some tree identification and learned the north facing slope is dominated by black walnut, with other interesting specimens including Ohio buckeye, hop hornbeam, and a shrub layer of bladdernut. Although the woodland is heavily infested with bush honeysuckle, a unique threat to this woodland is blue squill (*Scilla siberica*). This exotic member of the Liliaceae now covers at least a quarter acre and is increasing in size. Digging reveals that the leaves are sprung forth from a bulb buried an inch or more, making mechanical eradication shy of impossible for this population, numbering in the hundreds of thousands. John Richter and Hilary Haley witnessed the noticeable decrease in species diversity within the dense invasion. Based on John’s observations from earlier trips here, this population has doubled in size within the last ten years. Many spring ephemerals were found: false rue anemone, pale corydalis, Dutchmen’s breeches, bloodroot, wild geranium, dwarf larkspur, bellwort, toothwort, trout lily, and yellow, wooly blue, and white violets. A single *Billium sessile* (the elusive two-leaved trillium) was found growing among the large populations of wake robin. Other fun plants found included: columbine, golden seal, sweet cicely, maidenhair fern, and gooseberry. Those in attendance enjoyed playing scratch and sniff with sweet cicely and seeing the bright yellow underground portions of golden seal, gently using fingers to excavate dirt until the buried stem was revealed. The hike was concluded by learning about Missouri violets, prairie crab apple, and enjoying a plum thicket flush with aromatic blooms.

Plant sales were held on May 4<sup>th</sup> and 11<sup>th</sup>. Despite some unseasonably cold weather the first week of May, both sales were largely successful. The KC Chapter raises the majority of its funds through these sales and a big thank you goes to all

### REPORTS



who helped, especially to Sue Hollis, Dan Rice, and Ed O’Donnell.

At the May 7<sup>th</sup> chapter meeting, Caleb Morse gave a presentation on his extensive lichen research. Caleb has been working to collect and catalog lichen species from across North America, primarily within the Great Plains region. In his presentation, Caleb explained what lichens are, their morphology, and what roles they play in the environment. The talk concluded with the group observing preserved lichen samples brought in by Caleb.

Saturday, May 18<sup>th</sup>, the weather was beautiful for a field trip to Crooked River Conservation Area. John traveled to this location in Ray County, Missouri to learn more about the area. Oak and hickory trees are the dominant trees in the over story, and the Crooked River was flowing well. Unlike smaller drainages in Ray County, this river has sugar maples and cottonwoods associated with riparian areas. Mostly a driving tour, John crossed a wooden bridge over the river with his car and took a great photo of the river. It is John’s opinion that this area likely has some botanical treasures lurking in its remote acreage.

#### Ozark Chapter

*Submitted by Liz Olson, Chapter Representative*

At our April meeting, Ozark Chapter president Susan Farrington presented the beauty and wonder of Costa Rica through her photographs from her recent trip to Costa Rica. The tropical ecosystem came alive for us as Susan shared her encounters with poison frogs and bullet ants, adorable yet shy kinkajous, and the kind hosts and local guides.

On April 20<sup>th</sup>, Liz Olson led a plant walk at Tingler Prairie. While the prairie was still drab in winter brown, the moist woodland species were beginning to bloom, including may apple, spring beauty, violets, fire pink, and rue anemone. The highlight of the day was seeing the Ozark trillium (*Trillium pusillum* var. *ozarkanum*) in bloom. For our May meeting, Peggy Skinner kindly opened her property to our group for an enjoyable evening of botanizing and socializing.

## Osage Plains

Casey Burks, Chapter Representative

**Early Saturday March 30** Dr. Morton lead our caravan of cars to a property that has prairie chickens. It was a cloudy morning so the prairie chickens weren't venturing out to cut loose and "boom" in the open area but with high powered binoculars one could see several. Soon after arrival the rain started so we packed up with hopes of trying again next year.

**April 13<sup>th</sup>-14<sup>th</sup>** Members Dr. Morton, Theresa Cline and Casey Burks found their way to the Boonslick Lodge near the SW corner of MO for the 2<sup>nd</sup> MONPS meeting and field trips at Big Sugar State Park. Allison Vaughn and Tim Smith, park naturalist, gave an overview of this beautiful area with rich history including the swinging bridge builder who began the bridge by throwing a rock, with a string attached, from one side to the other. A huge effort, including fire regimen, to save the Ozark Chinkapin is going on here. It was almost wiped out by the chestnut blight and the blight continues to live in dead wood. It takes at least 3 years before new sprouts produce nuts. The Ozark Chinkapins being monitored sprout then die after five to ten years then new sprouts start. We all are hopeful this important species which helped the Ozark people avoid starvation can survive.

**April 15<sup>th</sup> Osage Plains monthly meeting.** Nancy Konkus shared her copy of "Tall Grass Prairie" with us. Produced by the Conservation Dept., it tracks the impact of civilization and shows why native plants survive so much better and how important the buffalo were to maintaining the ecosystem. Elections: Our wonderful President Emily Horner has been gently preparing us for her transition to the new St. Joseph chapter during this year. MDC Grassland Botanist, Elizabeth Middleton, has agreed to transition in as needed. Emily, Thank you for your leadership even after moving to Polo. Thank you, Elizabeth, for adding this role to your full plate. Bernie Henehan and Daniel Henehan agreed be co-trip planners, taking over for Jim and Dorothy Harlan. Jim and Dorothy needed to bow out of this position after 10+ years of doing a superb job checking out field trip areas for the group. We appreciate their dedication and being at the Library parking lot at 9am so many Saturday mornings to lead the caravan. I keep wondering if I'll be able to do half of what they do when I'm in my 80's! Bernie Henehan, who knows Henry and surrounding counties from his turkey hunting adventures, with his brother Dan Henehan, who lives on the Kansas side and is practically a professional nature photographer, will also do a great job of leading the group to field trip areas. We look forward to another year of camaraderie and learning.

**April 20<sup>th</sup> Field trip to the Peterman property.** Thirteen of us returned to this 35Acres of pristine woodland that has been for sale for many years. How I wish MDC could buy this property and save it from development bulldozers! It is an OP custom to visit this place in the spring since it affords incredible variety of early blooming plants on hills and by the creek. Sometimes we see a field of bluebells.

**May 14<sup>th</sup>** We lost our longtime member Dale Jennings. He was a vital and long time member of our group. Aided by his son Rick, he seldom missed a meeting. He opened his home in

July to host a dinner and meeting then gave us a wagon-ride around his property to see the native flowers he continued to plant—especially the varieties of coneflowers and liatris. As we rode on the wagon, we played "name that plant". Such a wonderful tradition he gave us. He will be dearly missed.

**May 20<sup>th</sup> : Osage Plains monthly meeting.** Even through a torrential downpour, several hearty soles arrived and Casey encouraged "Butterfly Gardening" with information on larval development, host and nectar plants. With the decline in the Monarch population, many people are becoming interested in providing milkweeds to help them survive migration. Everyone went home with 2 purple milkweed seedlings. Several people brought plants to exchange which is a great venue to try something new.

**May 25<sup>th</sup> : Field Trip to Chapel View Prairie in Henry County.** This was a new area that Bernie and Dan Henehan scouted out for us and it was fun to be challenged to learn new plants. Dorothy Harlan found a Mead's Milkweed, then another and another!! Besides water, we need to carry marker flags!!



Annual tour /potluck at Dale's home. (Dale is at the far left)

### Dale Jennings - Life Long Service In Promoting Native Wildflowers Submitted by Emily Horner

**Dale Jennings, a long and active member of the Osage Plain Chapter passed away this May. He was awarded the Blazingstar Award in 2007 for his work and that of his family to promote the enjoyment, preservation, conservation, and restoration of the flora native to Missouri. Every year, for almost 2 decades, he planted thousands of seeds and live plants of many native flowers on his property in Henry Co. This great diversity of plants and beautiful displays of blooms were enjoyed not only by Dale and his family, but by the many people traveling on Hwy 7 through Cole. Dale loved to share so he brought fresh cut bouquets to Sunday school, to Osage Plains chapter meetings, and to many others. Dale also maintained an annual dinner and tour of the native plants on his property for the Osage Plains Chapter. Over \$100 was given in his name to promote native wildflowers; and he will be honored with a native planting. Thank you Dale, for your love of beauty and nature.**

## St Louis Chapter

*Submitted by Rex Hill, Chapter Representative*

In April, **Richard Abbott** of the Missouri Botanical Garden gave a presentation on Polygalaceae, the milkwort family. Richard did his usual thorough job with his excellent photography of plants from around the world. Various web-based references put the family as having approximately 17 genera with 900-1000 species, half of which are in the *Polygala* genus, the only one of the family represented in Missouri. Four species are currently recognized in the Flora of Missouri – *P. incarnata* (24 counties), *P. sanguinea* (74 counties), *P. senega* (34 counties), and *P. verticillata* (~60 counties). According to the USDA Plants Database, six others not found in the synonyms for the above four are found in several adjacent states, including *P. alba*, *P. cruciata*, *P. mariana*, *P. nuttallii*, *P. paucifolia*, and *P. polygama*. The possibility of finding these could serve as the basis for future plant searches along the Missouri borders with the adjacent states.

In May, **MONPS** member, **George Van Brunt** gave a wonderful presentation of a trip taken to the island of Madagascar by him, and his wife, Layne. The talk was well-named, **Madagascar, Imperiled Island of Biodiversity**, as the burgeoning population and their needs for food and shelter is placing enormous stresses on what is an already delicate ecosystem. An island slightly larger than the state of California, isolated from other land masses and the effects of human population for millions of years, had a native plant population of over 12,000 species, 90% of which are endemic to Madagascar. Clearing of land for agriculture, and harvesting trees for fuel and lumber are causing the native forests to disappear and in many cases are being replaced by introduced species of pine and eucalyptus. George and Layne took many wonderful photographs and gave us all a picture of what remains in several areas of the country. The few preserves that they visited tended to be private and small, thanks to the efforts of individuals attempting to protect some of the native biodiversity. But, even those seemed to be plantings that, while they did preserve representative species, did not necessarily preserve the ecosystems where the plants originated.

## Perennis Chapter

*Submitted by Allison Vaughn, Chapter Representative*

No report this issue; see calendar for upcoming events.

*“Go my Sons, burn your books. Buy yourself stout shoes. Get away to the mountains, the valleys, the shores of the seas, the deserts, and the deepest recesses of the Earth. In this way and no other will you find true knowledge of things and their properties.”* Peter Severinus, a 16th Century Dane educator

## Southwest Chapter

*Submitted by Brian Edmond Chapter Rep*

Several members of the Southwest Chapter teamed up with the Springfield Plateau Master Naturalists for a wildflower trip to Bull Creek, lead by Bob and Barb Kipfer. Despite the very late spring, we managed to scare up some flowering bloodroots, trout lilies, toothwort, and several other early-blooming species.

Our planned trip to Smallin Cave was cancelled due to inclement weather. Although it wasn't actually snow and sleet that got us this time, we were faced with a wind chill below freezing to search for wildflowers. We still have plans to assist the landowners with a native plant restoration and management project.

Rain has been forthcoming this year, regular and moderate, after a brutal two-year drought. Although the dry years gave the natives a chance to shine, it seems that they suffered some, too. They are back now and growing like weeds, so to speak! Unfortunately, the honeysuckle, roses, and chickweed are also back stronger than ever. Watch the Facebook Events page and your email inbox for details about upcoming events!

## The 2012 Missouri Natural Areas Newsletter

is now available on-line at: <http://mdc.mo.gov/node/20281>

From: Mike Leahy, Natural Areas Coordinator  
Missouri Department of Conservation

## Hawthorn Chapter

*Submitted by Ann Wakeman Chapter Representative*

May 13 regular meeting held at Columbia Library. Douglas LeDoux presented an informative program regarding insect threats to Missouri Forests. Doug is State Survey Coordinator for the Missouri Department of Agriculture, and is part of a team surveying for insect pests potentially harmful to Missouri's forests. Several agencies coordinate these surveys throughout the state. Most of the insect pests are exotics, but there are a few natives that create problems for Missouri's native trees. The most recent threats are Emerald Ash Borer and looming on the western horizon, Thousand Cankers Disease, a fungus killing walnuts trees carried by the walnut twig beetle. The black walnuts were planted outside their native range in Colorado and westward and are dying from this disease.

The Chapter set a booth at two events, Spring Native Plant Sale at Bradford Farm on April 13, and Columbia's Earth Day April 21. There was much interest in native plants at these two events. Book and plant sales brought in \$1700 and attracted two new members.



## Please Friend us on Facebook



And more information on our website

[www.missourinativeplantsociety.org](http://www.missourinativeplantsociety.org)

**Perennis**

14 July Sunday, 9:30 am: Hike through the Sand Prairies of Southeast Missouri. We will meet at the Sand Prairie Conservation Area outside of Benton at 9:30 am. Directions: (From Interstate 55) Take the Benton exit (80) to Highway 77, turn southeast (left), continue on Highway 77 for approximately two miles, then turn north (left) onto County Road 333, and travel approximately two miles to the area. Weather permitting, we will visit other remnant sand prairies in the area that day. For those interested, we will have lunch at River Ridge Winery in Commerce, Missouri after the hike. Check the website for upcoming impromptu hikes and potential fieldtrips with the Illinois Native Plant Society in southern Illinois. For more details, weather restrictions, rescheduling visit <http://www.semonps.org/> or contact Allison at [allisonjv@yahoo.com](mailto:allisonjv@yahoo.com)

**Kansas City**

**July – canoe trip?** All details TBD. Sue Hollis agreed to organize a canoe trip down the Eleven Point River if persons are interested. If you are interested in canoeing, please contact Sue Hollis: [ferngro@att.net](mailto:ferngro@att.net) to voice your interest.

**August** – break from activities.

**3 September, Tuesday, 7:00 PM**, MDC Discovery Center: **Chapter meeting**, activity TBD.

**28 September, Saturday – Little Bean Marsh:** Car pool location and meeting time TBD. Contact person is John Richter: [jack\\_0\\_lantern@hotmail.com](mailto:jack_0_lantern@hotmail.com). his area has many wetland features in the Missouri River floodplain. Very diverse habitats to explore, bring rubber boots.

**Hawthorn**

For folks interested in hiking and wildflower sightings around the state, See chapter newsletter for details; also available on [www.columbianativeplants.org](http://www.columbianativeplants.org) Otherwise participate in outings with other chapters and MPF.

**12-14 June** State fiend trip to Salem/Ellington Area

**8 July Monday Regular**

**Membership Meeting**, 7 PM

Unitarian Universalist Church, 2615 Shepard Blvd. Program TBA.

**18 July Thursday: Lunch with Native Plant Enthusiasts**, 11:30 at RagTag, 10 Hitt St [Just south of Broadway]. Informal exchange of ideas and information

**1 August Thursday** – planning for participation in Organic gardening workshop at Bradford Farm. Look for details in future issues.

**15 Thursday: Lunch with Native Plant Enthusiasts**, 11:30 at RagTag, 10 Hitt St [Just south of Broadway]. Informal exchange of ideas and information



**Osage Plains**

Regularly scheduled chapter meetings are held the 3<sup>rd</sup> Monday of each month, 6:30pm, at the Henry Co. Library, Clinton, except for special dinner meetings. For info, contact Emily Horner [emily.horner3@yahoo.com](mailto:emily.horner3@yahoo.com), Jim & Dorothy Harlan [jdharlan@socket.net](mailto:jdharlan@socket.net) or Casey Burks [mobugwoman@gmail.com](mailto:mobugwoman@gmail.com)

**18 May Sat:** Field Trip to Bernie Henehan’s property in Johnson Co. Meet at Henry Co. Library 9am.

**20 May, Monday: 6:30pm** Our own MO Bugwomen, Casey Burks, presents on how to build a butterfly garden. Take home a few plants and start your own. Henry County Library Friends Room.

**Southwest**

Green Co Botanical Center, Spgfld, 4<sup>th</sup> Tuesday, 6pm

**23 July Tues:** Garden Maintenance. Speaker TBD. 6pm

**27 August Tues:** Garden Maintenance. Speaker TBD. 6pm

**St Louis**

Chapter meetings are held on the fourth Wednesday of the month at the Sunset Hills Community Center, 3915 South Lindbergh Blvd., Sunset Hills, MO 63127.

Google Map: <http://goo.gl/maps/K3PR>

**26 June:** We take advantage of one of the longest days of the year to botanize along the Meramec River on part of the Al Foster Trail in Glencoe, MO. Meet at **6:00 pm** at the parking area for Wabash Frisco and Pacific Railroad. Details on the websites.

**24 July 7:30 PM: Matthew Albrecht**, conservation scientist working at the Missouri Botanical Garden coordinates the activities of the Center for Plant Conservation for MBG. He will tell us about the CPC’s mission and their conservation work with Midwestern species.

**28 August 7:30 PM: Mike Leahy**, Natural Areas Coordinator for the Missouri Department of Conservation will provide an overview of the natural communities of Missouri, with examples of how they are protecting some of our rarest native plant species.

**Ozark**

The Ozark chapter meets at 6:30 pm on the third Tuesday of each month at the Missouri Department of Conservation Ozark Regional Office, 551 Joe Jones Blvd, West Plains, MO 65775.

In the summer months, the Ozark chapter hosts plant identification nights. All are welcome to bring in plant specimens or photos that you would like to share or wish to have identified.

<<< Indian paintbrush graphic



## BE A CITIZEN SCIENTIST

### Please sign up for Bud Burst.

Keep a calendar, or diary, or "list" of when you see plants emerging, when you see trees blooming or leaves erupting, when seeds are ripe. All the instructions are on the Bud burst web site. The site starts by asking you about common garden plants, but you can add anything you want.

If you also enjoy birds and herps and Monarchs, there are citizen scientist data reporting sites for frog calls and for bird counts all year around. Start by looking at the Cornell Ornithology website and the MDC website. Monarch Watch will give you the parameters for Monarch assistance and data reporting.



## Dues are Due

Message from Ann Earley, Membership Chair

Membership renewals for the July 2013-June 2014 year are due. Please check the top line of your mailing label. If it shows the date 20130630, your dues are now payable. When renewing, please remember to include your contact information including email address, and your society and chapter dues preferences.

If you have questions about your membership status, please contact me (see back page for contact information). We value our members and urge you to renew today!

Change screen time to green time. Get out, explore, learn firsthand.



### Information on joining Missouri Native Plant Society

#### Society Dues

Circle all that apply  
[Chapter dues additional]  
Student = \$5  
Regular = 10  
Contributing = 20  
Life = 200

#### Chapter Dues

Columbia = \$6  
Kansas City = 5  
Osage Plains = 5  
Ozarks = 5  
Perinnis = 5  
St Louis = 5  
Southwest = 5

Contribution to Hudson Grant Fund \_\$ \_\_\_\_\_

\*All contributions are tax deductible\*

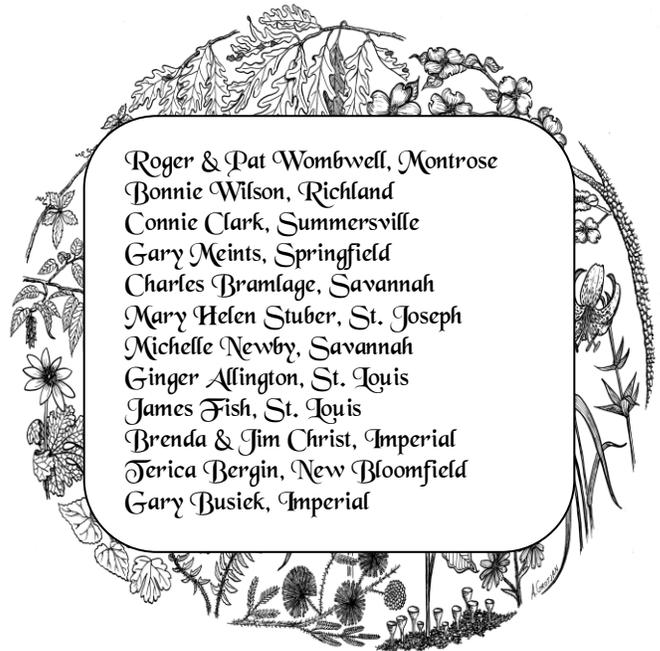
Make checks payable to MO Native Plant Society



Just in case you missed the Amelanchier arborea. *BE photo*  
25 April, Bennitt CA, Boone Co



## Welcome to New Members!



Mail to: Missouri Native Plant Society  
PO BOX 440353  
ST. Louis MO 63244-4353

Name \_\_\_\_\_

Address \_\_\_\_\_

9-digit zip \_\_\_\_\_

Sometimes activities are changed at the last minute so we need a way to notify you.

Phone \_\_\_\_\_

Email \_\_\_\_\_

## An April Day at Holly Ridge

Submitted by Dave Schilling

In "Behind the Scenes", Cora Steyermark comments about an April visit to Holly Ridge:

"We always left such areas reluctantly, not knowing if partial or total destruction would greet us on the next visit...Acres of farmland can produce corn to feed animal life, but such land is totally unable to grow orchids to feed the mind and soul."

So on a sunny Saturday in late April a car-full of us departed St Louis to go feed our minds and souls. John Oliver had proposed taking some field trips to areas beyond the twenty/forty mile radius that has gotten to be the norm. Besides, it was spring! From past experience he knew some of the rare orchids would be close to bloom. And he led us right to them.

First, a grouping of a half-dozen *Isotria verticillata* (large whorled pagonia).

Some of them reaching for hi-bloom as photography enthusiasts carefully knuckled-down (bellied-down) to capture the seven/eight-inch purple-stemmed rarities with their

very long, delicate sepals. And soon John rediscovered that lone, notorious (in a happy way) *Listera australis* (southern twayblade). What a serendipitous story here. Julian S had not found it. Bill S had not found it. But Justin T on a weekend MoNPS event in April 2009 had. Yet he did not recognize it for the unique rare find it was; did not interrupt other fellow members as they perused that day; did not know exactly what he had found; but happily did share a photograph of it that evening with fellow members; and next morning, back to Holly Ridge Natural Area to relocate this diminutive orchid and show the others.

To date, it seems this is the only plant of the species found here...in the entire state! The "lonesome George" of our *Listera*. We are photographing and delicately tiptoeing around the only specimen. No others. Wow. Continue this line of thinking and I will soon feel like a person at the Cincinnati Zoo at the turn of the 20<sup>th</sup> Century viewing that last passenger pigeon before it croaked. Because even in Natural Areas all is not well. Will you look at that advancing tide of *Lonicera japonica* creeping over this sandy forest floor. Although rewarding images of these endangered orchids are now etched in my mind, things are wickedly far from copacetic for the vanishing orchids.

Me, I thank John O for a perfect field trip. Justin T for his sharp eyes. And so many of those participants in lobbying organizations that get these jeweled habitats set aside. As Cora S. quotes Julian, "Maybe the soil will not make you a living here, but what a gem to own for preservation, or to save as a preserve for posterity."

## Productivity Increases with Species Diversity, Just as Darwin Predicted.

University of Toronto Scarborough (UTSC). (2013, May 13).

ScienceDaily. Retrieved May 22, 2013, from

<http://www.sciencedaily.com/releases/2013/05/130513152830.htm>

The experimental result from Marc William Cadotte confirms a prediction made by Charles Darwin in "On the Origin of Species", first published in 1859. Darwin had said that a plot of land growing distantly related grasses would be more productive than a plot with a single species of grass.

Since then, many experiments have shown that multi-species plots are more productive. Cadotte's experiment showed for the first time that species with the greatest evolutionary distance from one another have the greatest productivity gains.

"If you have two species that can access different resources or do things in different ways, then having those two species together can enhance species function. What I've done is account for those differences by accounting for their evolutionary history," Cadotte says.

Cadotte grew 17 different plants in various combinations of one, two, or four species per plot. As in previous experiments, he found that multi-species plots produced more plant material. But when he analyzed the results he also found that combinations of plants that were distantly related to one another were more productive than combinations of plants that were closely related. So, for instance, a plot planted with goldenrod and the closely related black-eyed susan wasn't as productive as a plot with goldenrod and the more distantly related bluestem grass.

What's going on isn't mysterious, Cadotte says. Distantly related plants are more likely to require different resources and to fill different environmental niches -- one might need more nitrogen, the other more phosphorus; one might have shallow roots, the other deep roots. So rather than competing with one another they complement one another.

**What's interesting about his result is that evolutionary distance is all you need to know to predict productivity. The result suggests that as plant species disappear Earth will become less productive, and plants will draw even less carbon from the atmosphere, possibly increasing the rate of global warming.**

On the other hand, the results could give a valuable tool to conservation efforts. Environmentalists trying to restore damaged habitats could use the information to help them pick which combinations of species to introduce.

[ED note: message here is to tear up part of your 'lawn' and plant more species different from what you already have. If you can make the colors amazing, some of the neighbors will want to do it too.]

B Schuette photo



## In the Buzz About Bees, Don't Forget the Natives

From NWF website [Wildlife Promise](#) 30 5/20/2013 // [Laura Tangley](#) // [Certified Wildlife Habitat](#), [Colony Collapse Disorder](#), [Garden for Wildlife Month](#), [National Wildlife Magazine](#), [Native Bees](#)



A bumblebee visits a coneflower in a Dayton, Ohio, backyard. *Photo by Josh Mayes.*

### Honeybees

have been in the news a lot this month. On May 2, the federal government published [results of a comprehensive study](#) looking at potential causes of the insects' dramatic decline in a phenomenon known as [colony-collapse disorder](#). The widely publicized report blamed a combination of problems, including parasites, pesticides, bad nutrition and low genetic diversity within hives.

The following week, some U.S. activists made headlines by demanding the government ban a class of insecticides, [neonicotinoids](#), after learning the European Union placed a moratorium their use due to concerns the chemicals are harming honeybees. (Imported to North America during the 1600s, **honeybees are native to Europe**.) Such concerns are understandable. Beyond their honey-making prowess, domestic honeybees are worth tens of billions of dollars to U.S. farmers and beekeepers, who truck colonies back and forth across the country to **pollinate commercial crops such as almonds, soybeans and watermelon**.

### Why We Need Natives

Yet with all the attention being paid to honeybees, I wonder if we're overlooking an even more important story: the critical **role wild, native bees play pollinating plants** both in natural and agricultural systems. And unlike domestic honeybees, these natives do it **for free**.

[Mace Vaughan](#), pollinator program director at the [Xerces Society for Invertebrate Conservation](#), made precisely this point when I interviewed him recently for an upcoming story in [National Wildlife magazine](#). **Bees are by far the most important pollinators in natural ecosystems**, Vaughan told me. The insects also are essential to producing more than a third of all foods and beverages humans consume. "In the United States alone, **native bees contribute at least \$3 billion a year to the farm economy**," Vaughan said. "We grossly overlook the critical role these animals play."

### Wild Pollinator Champs

I learned about that role a few years ago working on another article, "[The Buzz on Native Pollinators](#)," that described research conducted by ecologist [Rachel Winfree](#) of Rutgers University. Winfree had just published in *Ecology Letters* results of a study finding that **on 21 out of 23 farms** in the Delaware Valley of New Jersey, **wild bees fully pollinated commercially grown watermelons with no help from honeybees**. "If we lost all honeybees in this region to colony-collapse disorder tomorrow," she said, "between 88 and 90 percent of the watermelon crop would be fine."

This February, Winfree and dozens of colleagues published results of much [larger study in Science](#) that looked at a diversity of fruit, seed, nut and other crops growing in 600 fields on all continents except Antarctica (where no food is grown). They found that visits by wild bees increased production at all study sites, compared with just 14 percent for managed honeybees. The upshot: **Wild bees were more effective crop pollinators than were domestic honeybees**.

If honeybees continue to decline—and many experts suspect they will—**wild bees will become even more important in the future**. Worrisome as colony-collapse disorder is, it may have had "a silver lining," [Scott Hoffman Black](#), the Xerces Society's executive director, told me. "Now many more people know that their food is pollinated, and that we need native bees and other wild animals to do that."



A bumblebee feeds on buttonbush at NWF's office in Reston, Virginia. *Photo by Laura Tangley.*

**Certify Now** >

Help wild bees by [growing native plants](#) they need to thrive, then turn your yard into a [Certified Wildlife Habitat®](#) site. This month only, [Garden For Wildlife Month](#), NWF will plant a native tree for every property certified.

## Meeting the Weed Inspector

Submitted by Allison Vaughn

The deep loess soils in my yard support thriving populations of *Carex davisii*, a northern Missouri sedge, which stands knee high when it's flowering. Also in my downtown Columbia yard exists a 400 year old chinquapin oak that served as a witness tree during the General Land Survey in 1843, marking a corner point with line notes that read "open woods, land wet with thick grass and vines, unfit for cultivation". I was attracted to this canary yellow 1932 Craftsman bungalow because of its proximity to downtown but primarily because the yard had no lawn, only remnant populations of woodland flora like *Tradescantia ohiensis* and *Geranium maculatum* peeking out from dense black oak leaf litter.

When I contacted the landlady in San Francisco to tell her I would rent her cute little Craftsman, I told her I would like to burn the yard to "see what would come up." She explained to me then, back in 2007, that she had always wanted to do that having seen that the yard contains woodland flora and only traces of lawn grass from previous owners' attempts to plant Kentucky bluegrass and fescue, none of which did well in the heavy clay soils associated with upland flatwoods. She also told me that she engaged in several battles with the local Weed Inspector from the city's Health Department over the *Carex annectans* and other sedges that dominate the front and backyards.

Several years passed, and I sent annual low intensity fires through the front and backyards of my urban lot. It wasn't until one day in June 2010 that I received a panicked call alerting me that the city had threatened to mow the yard if we didn't "cut the weeds". I had already created a plant list for the yard and had rigorously hand trimmed the errant patches of fescue and bluegrass that were almost eradicated from the yard by competition of native flora. The yard had come a long way in the past few years, recovering from previous renters in my low income neighborhood had likely parked their vans on cinder blocks and taken out engines leaking oil all over the place. Of course, my rental yard will never be natural area quality, but it's been fun to see *Sisyrinchium* come up each May and the wild geraniums spreading all over the place.

Wanting to avoid a disaster by the city who may spray herbicide or bring a huge mower onto our very fragile and recovering sloping soils, we dutifully plugged in an electric weedeater that we found covered in cobwebs in the basement to manage the front yard. We cut down the sedges along the street, the juncos, the tall, flowering *Erigeron* and *Penstemon pallidus* (a typical flatwoods plant). And then I took my plant list to the Health Department for an appointment with the Weed Inspector.

I asked the weed inspector and his assistant to please tell me which of the 98 native species in my yard were "weeds", knowing that the yard is devoid of bush honeysuckle, Johnson grass, sericea, other known classified "weeds" in Missouri. He looked at my list of Desmodiums and sedges, native wildflowers that have persisted through 150 years of abuse from landowners with mowers and cows, and he couldn't answer my question. Instead, he diplomatically agreed to walk to my house so he could show me which plants were weeds.

He pointed to *Carex amphibola* and *Vitis cinerea* along the curb, and called them weeds. Same with the *Helianthus hirsutus*. I realize it's an old saw, a native plant enthusiast talking to a bureaucrat about the benefits of native landscaping, so I gently explained to him that all of those asters will bloom in fall, creating a floral display that resembles the native plantings in our own city parks. I told him I like to leave long stalks in the yard for wintering insects and about the natural ecology of my town and what a great treat it is to have a vaguely intact version of this landscape still around. The very reasonable weed inspector offered a grumbling "harrumph", and told me that I needed a sign, something "interpretive" alerting passers by and other weed inspectors that my yard is "intentional or whatever", and not merely "neglected".

And so, that night, after my awesome patch of *Aster drummondii* (came up after the first fire) was saved from the scythe, I logged onto the National Wildlife Federation's Backyard Habitat website to receive certification that my downtown yard isn't just an overgrown lot. After answering a series of questions like: do you provide nesting sites for birds? water for wildlife, brushpiles? native plants? I plunked down \$35 as a donation to NWF for a nice, slick, metal sign to post in the yard, per the weed inspector's request.

Today, I've learned my lesson that I should manage the front yard with hand pruners, to trim the plants that grow up to my knees, while letting the backyard grow wild. The NWF sign seems to be keeping the Weed Inspector at bay, and after a long workday, it's truly comforting to come home to my miniscule tract of fire-mediated yard with the chattering house wrens, my awesome chinquapin oak, and all those sedges that are sorting themselves out through the years.

[Ed note: I know of several other experiences, all of which ended the same way: If you put up a sign from NWF or Wild Ones or paint your own to interpret it as pollinator habitat, you won't get too many complaints when you manage your city yard for natives. Happy Gardening!]



AV photo



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 It is wrong when it tends otherwise." Aldo Leopold**

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John Oliver



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