Native Plant School is a partnership between Shaw Nature Reserve, The Missouri Department of Conservation, and Wild Ones Natural Landscapers. Classes are held in the Whitmire Wildflower Garden at Shaw Nature Reserve.

Please register at shawnature.org/NPS

Upcoming classes:

Thursday, September 10, 1-4 p.m.
If You Plant It, They Will Come – Gardening for Pollinators
by Susie Van de Riet

Friday, September 11, 4-7:30p.m.
Shaw Wildflower Market

Thursday, October 8, 1-4 p.m.
Gardening with Asters and Goldenrods

Saturday, October 17, 1-5 p.m.
Celebrating 10 Years of Greener Gardens: Native Plant School's 10th Anniversary!

Thursday, November 12, 1-4 p.m.
Growing Native Trees and Shrubs from Acorns, Nuts and Berries

Please register at shawnature.org/NPS

Nature Connection:
Common Milkweed - Insect Magnet

How many licks does it take to get to the center of a common milkweed flower ball? One, two, three...buzz! Common milkweed flowers are irresistible to bumblebees, honeybees, flies, butterflies and moths who are commonly seen clambering over each other in search of sweet floral nectar. Insects seem to like it for two reasons: the bitter milky sap seems to be rich in sucrose, while the toxic glycosides can concentrate in the organism consuming them, making them in turn toxic to potential predators. Perhaps its sweet fragrance also has something to do with the high concentration of insect activity. In either event, common milkweed makes a great addition to larger gardens.

“If human beings were to disappear tomorrow, the world would go on with little change. But if invertebrates were to vanish, I doubt that the human species could last more than a few months.”

~ E. O. Wilson
Celebrating 10 years of Greener Gardens:

You are invited!

Celebrating 10 Years of Greener Gardens: Native Plant School's 10th Anniversary!

Keynote speaker Alan Branhagen (director of horticulture at Powell Gardens) will be introducing his new book *Native Plants of the Midwest* (Timber Press).

Saturday, October 17, 1-5 p.m.
Free to the Public
RSVP at besa.schweitzer@mobot.org

10th Anniversary Schedule:
1 p.m.
Tour the Whitmire Wildflower Garden and visit exhibits.
3 p.m.
Social, music, light food and refreshments.
4 p.m.
Keynote Address: ALAN BRANHAGEN.

Special thanks to Wild Ones St. Louis for Sponsoring this 10th Anniversary Celebration!

Exhibitors Include:
- Conversations with native plant experts
- Wild Ones St. Louis
- Audubon's Bring Conservation Home
- MO Master Naturalists
- Grow Native!
- Wild Bird Rehabilitation
- Lincoln University
- Perennial workshops
- Dale Dufer
- The Art Center at Gilbergs
- Edg-Clif Vineyard

Live music in the Garden: Nathan Gilberg, Matt Rowland and Friends

Free willow seedlings (prairie, sandbar and diamond) to the first 100 attendees. Tallamy says there are 456 caterpillars on willow!!

Nothing says this planting is intentional quite like an obvious boundary. Many prairie plantings are bounded by a split rail fence but the same effect can also be achieved with a hedge or even with a hedge along your fence. In the garden we are doing just that by putting a hedge of prairie willows, *Salix humilis var tristis*, along the prairie side of a split rail fence and a hedge of butterfly milkweed, *Asclepias tuberosa*, along the front. (Photo above left.) This triple boundary should be a mecca for pollinators next summer with willow attracting 456 species of caterpillars, according to Tallamy, and the milkweed attracting the threatened monarch butterfly along with a bunch or other pollinators. Visually, the increasing heights of the plantings will make a clean transition from lawn to prairie.

Hedges can also be used to create outdoor rooms in your garden. A simple hedge of aromatic asters, *Aster oblongifolius*, is being installed in a large circle near the Bascom House. (Photo above right.) A boring lawn now has interest as you have to enter and leave the aster circle to walk across. The aster hedge will also be a pretty boundary during events when we set up a tent in the middle.

We look forward to watching these hedges mature over the next year and bring new structure to this part of the garden.

**Shaw Wildflower Market**
Friday, September 11, 4-7:30 p.m.

Shop for locally produced native plants, food and crafts. Also, experts will answer your native gardening questions.

The Shaw Wildflower Market is geared for new and experienced gardeners and people looking for locally made products for a greener community, including Wildflowers from Missouri Wildflower Nursery, Wine, Bread, Meats, Art, Crafts and more. Cash or check accepted by all vendors.

The event is located in the pavilions behind the Bascom House, near the Whitmire Wildflower Garden at Shaw Nature Reserve. Regular SNR admission fees apply.

More info at shawnature.org/SWM
Collecting Trip Report:
By Besa Schweitzer

The first week of June, my coworker Terri and I, set out into the Missouri Ozark wilderness to find new plants. One of the best parts of my job is getting to explore new places and hang out with other plant geeks. On this trip we headed down to a large tract of private property on the Black River in Reynolds County owned by one of our former volunteers. We find lots of interesting plants when we explore private property because it is likely that we may be the first horticulturalists to explore that piece of land. Our goal is to find new garden worthy native species and bring them back to the Whitmire Wildflower Garden. Plants that we bring back spend their first few years in our trial garden where we can observe them closely and make sure that they don’t have any undesirable garden characteristics like browning out or taking over. If they pass the trial garden, then we move them into the Whitmire Garden. The next step is to start selling them at our plant sale and recommending them to the public. Our most recent plant to complete this process is Carex fissa, the Hammock sedge, which is a stout spiky sedge that likes wet feet and you can bring home with you next spring.

During our trip to the Black River we walked up several spring fed creeks which eventually flow into the river. We saw many species of ferns, sedges, and woodland forbs. One spring we followed, terminated in a large stone basin that was filled with bubbling blue spring water like a bath. Whoever created that basin was a genius because I can think of no better place to be during Missouri summers than sitting in a tub of cold clear spring water. As spring waters stay at a constant 56 degrees year round, it was probably also the warmest source of water during the winter.

After struggling through a thick tangle of shrubs we found a lovely little pond surrounded by sedges with a beautiful tupelo tree majestically hanging over. We have discovered that springs coming out of a hill side into sunny meadows are our most productive places to find sedges. These boggy areas were exciting to explore but you had better watch where you step or you might go into a muddy hole up to your knees!

Missouri has an abundance of tucked away natural areas full of native plants that have not yet been introduced to horticulture. It is so exciting to see a plant in someone’s yard and think about how it’s parent plant is still growing in nature, fulfilling an important role in the ecosystem. Maybe you have a couple hundred undisturbed acres filled with native plants that we might be able to explore and find new garden worthy plants to bring back to our garden. Let me know if you do.
Who Needs National Geographic When you can Take a Week Long Safari in Your Own Backyard:
By Scott Woodbury

Monday August 19,
Two praying mantis setup shop just outside my office window, each one on separate Eastern blazingstar (Liatris scariosa var. nieulandii) plants (none of the flower clusters open). I can’t tell if they are the native or Asian species. I’ll need some assistance to identify. Dr. James Trager confirmed that they are the Chinese species. So should I kill them? According to Trager they are a permanent fixture in our natural environment and killing them wouldn’t make any difference in the grand scheme of things. I’ll keep reporting on the free show then.

Thursday August 22,
As I glance out my window between editing a flyer and checking emails something grabs my attention. The praying mantis to the right (I’ll call it Pouncer) is in plain view and has captured a bumble bee. A wing falls to the ground and then a leg as the mantis continues munching away. I go back to work. An hour later I spot it creeping up a different flower stalk like my cat stalks in the tall grass. It slowly pulses forward seemingly wound up and ready to pounce on its next victim. Just then a hummingbird appears. They instantly lock eyes. The hummingbird does a 360 hovering around the praying mantis while focusing its attention directly at the mantis. The mantis rotating its stance all the while facing the bird and appearing to stand its ground. The bird flies away even though there are five other blazingstar stalks with a total of 6 open flower clusters just out of reach from the mantis. Has the mantis scared off the hummingbird? It appears that way.

Friday August 23,
10:30 a.m. A hummingbird flies in for nectar but this time isn’t bothered by the mantis and makes its round among 16 open flower clusters. I’m beginning to wonder what the mantis would attempt to catch and eat when a small dark skipper lands an inch away from the mantis. Arms instantly snap out but the skipper gets away.
11:45 a.m. A bee nearby gets a head turn. Then a monarch lands on an adjacent plant getting the full attention of the mantis. It waits, waits, waits then in another fraction of a second the monarch lands within reach of the mantis powerful arms, arms reach out like lightning and the monarch gets pulled in. For a couple seconds the monarch seems trapped but then flies away. Two questions; couldn’t the monarch see the huge praying mantis sitting on the next stalk over just six inches away? I guess not. The mantis stealthy green legs and tan wings hide it pretty well. Secondly did Pouncer let go after getting a taste of the bitter monarch? It continues to wait for the next unsuspecting critter to get close.
1:30 p.m. I just missed Pouncer leap/ fly from one stalk to another nearby to snag a silver spotted skipper which it is eating right now. There falls one wing, the other gets stuck on a flower stalk. A possible warning to keep away? Likely not.
1:45 p.m. Pouncer is cleaning its head much like a cat cleans the fur on its face. Now its ready for what comes next.

Mosquito News:

New science finds that bush honeysuckle around ponds grows more mosquitoes than native plants.

http://www.sciencenewsline.com/articles/2015070115290087.html

Comments on winters in Missouri....
A typical Missouri winter can be rather fickle. Sometimes we have winters when you never can skate on a pond or walk on ice. Other winters (like the winter of 2013-14), we have long cold spells with ponds and rivers freezing over and forming amazing ice sheets. Old timers say those types of hard winters were more typical 30 to 50 years ago. Nowadays, our typical winter cold spell lasts 3 or 4 days, then we have a warm spell and it goes back and forth like that all winter long. That’s a challenge for gardeners because the soil stays soggy under those conditions, which leads to quite a lot of root mortality. When the winter is consistently cold and the soil stays frozen, plants often snap out of dormancy and flower better in the spring. That’s why in the spring of 2014 we had the biggest show of spring flowers that I’ve seen in years.

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Plant Hardiness:
By Scott Woodbury

Comments on USDA hardiness maps...
Personally, I don’t pay attention to the USDA climate zones. I’d rather just promote local ecotype plant material. If you use plants that are from here and that have been evolving here for thousands of years, I don’t think there’s any need to look at climate maps because you already know those plants are likely to thrive here. That said, it is still important to choose the right plant that fits the particular conditions (soil, sunlight, moisture, etc.) in your garden.

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