

The News From Native Plant School

June 2015



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, June 11, 1–4 p.m.

Landscaping for Deer Resistance

Some native plants are resistant to deer browse, others are not, and some fall in between. This class will focus on 100 native plant species and their resistance to deer. We also will look at methods to prevent deer antler rubbing.

Upcoming Fall schedule:

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, 4-7p.m.

Shaw Wildflower Market

Thursday, October 8, 1-4 p.m.

Gardening with Asters and Goldenrods

Saturday, October 17, 2-6 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

Shaw Wildflower Market was a wet success:

We sold over 5000 plants of more than 200 different native species and gave away 600 annuals to 1750 visitors. I hope you were one of them!



2015 Sustainable Backyard Tour:

The Sustainable Backyard Tour will be **Sunday June 14th**. This event is free!

www.sustainablebackyardtour.com

Blanton Whitmire

Blanton died early Sunday, May 24, at his home in Kirkwood at the age of 97. The Whitmire Wildflower Garden at Shaw Nature Reserve was a gift he made as a birthday present for his wife Peg, who died in 2010. With the enthusiastic and generous support of the Whitmires, the Whitmire Wildflower Garden opened in 1993 and has been growing ever since. Blanton will be missed by all of us at SNR and native plant gardeners everywhere.

<http://www.legacy.com/obituaries/stltoday/obituary.aspx?n=blanton-whitmire&pid=174945894>

Gardening Tips:

- Vigorous, unwanted limbs should be removed or shortened on new trees. Watch for forks in the main trunk and remove the least desirable leader as soon as it is noticed.
- Cultivate and mulch. Mulching will reduce about 70% of the summer yard maintenance.
- Continue to water new plantings deeply as needed. Apply at least one inch of water each time.
- Softwood cuttings from new growth of many shrubs will root if propagated in a moist shady spot.

St. Louis Native Plant Garden Tour:

Registration is now open for the St. Louis Native Plant Garden Tour on Saturday, June 20 from 9 AM to 3 PM.

Take a self-guided tour of 10 residential native plant gardens in central St. Louis County. Various locations in Brentwood, Clayton, Glendale, Kirkwood, Webster Groves and more.

- Sun, shade, butterflies, birds, dry sites and wet
- Traditional and natural designs
- Take pictures and ask questions

Cost: \$20 per person. Proceeds benefit the tour organizers: St. Louis Audubon's Bring Conservation Home program and Wild Ones – St. Louis Chapter

<http://www.stlouisaudubon.org/calendar/content/NPT-2015/>

Don't wait! Registration ends TOMORROW June 10.

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9 am to 3 pm
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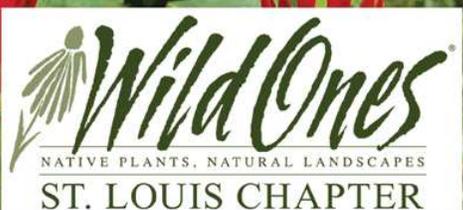
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Registration

www.stlouisaudubon.org
www.stlwildones.org



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, 2-6 p.m.
Free to the Public

10th Anniversary Schedule:
Visit Exhibitors, Tour the Whitmire Wildflower Garden with Garden Staff, Keynote Address: ALAN BRANHAGEN, Social, light food and refreshments .

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

Exhibitors Include:
Wild Ones St. Louis, Shaw Nature Reserve, MO Master Naturalists, Audubon's Bring Conservation Home, Grow Native!, Missouri Native Plant Society, Bush Honeysuckle Tables with Dale Dufer, Perennial, and Wild Bird Rehabilitation.

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

"Kind hearts are the gardens, Kind thoughts are the roots, Kind words are the flowers, Kind deeds are the fruits, Take care of your garden And keep out the weeds, Fill it with sunshine, Kind words, and Kind deeds."

Henry Wadsworth Longfellow

EAB found in St. Louis City:

By Mark Grueber , Missouri Department of Conservation

You may not be aware that we recently found an Emerald Ash Borer (EAB) infestation in north St. Louis City, near Calvary Cemetery. The tree was found by a crew from Nelson Tree Service working as a contractor for Ameren. These very observant individuals not only found the characteristic 'D' shaped exit holes but also carefully shaved the bark, exposing "textbook" 'S' shaped galleries (see photo below). Since the tree was small and virtually dead, the decision was made



to remove the tree in pieces for closer inspection. One of the Nelson crew then noted an adult still in the gallery that was exposed at a hinge cut. The adult was sent to Washington D.C. for verification and confirmation was received late yesterday afternoon.

I'm certain that more information will be forthcoming from our office and the Missouri Department of Agriculture. Traps have been placed nearby as visual inspections of the area would seem to indicate that the insect has been present in the area for some time, but stay tuned for more details.

Thanks again to Nelson and Ameren who should be commended for their training program and response to the find.

Ant Dispersed Seeds:

While you are out enjoying your garden keep an eye out for ants carrying seeds. Ants are the primary form of seed dispersal for some garden plants. Take a close look inside the bloodroot (*Sanguinaria Canadensis*) seed pod in mid June. Each dark brown seed inside the pod has a fleshy elaiosome attached that ants find irresistible. The elaiosome is rich in protein and is the perfect snack for an ant. As the pod naturally splits open the ant will collect each seed individually and carry it back to the nest. In the nest the elaiosome is consumed and the left over seed is thrown in the ant colony's trash pile. The ant trash pile is a great place for the seed to germinate in the rich compost of ant waste, protected from predators, and far away from the parent plant.



Host Plants & the Butterflies they Attract:

Willow (*Salix* spp.) - Red Spotted Purple (*Limenitis arthemis*)

Black Cherry (*Prunus serotina*) - Tiger Swallowtail (*Papilio glaucus*)

Pawpaw (*Asimina triloba*) - Zebra Swallowtail (*Eurytides marcellus*)

Spicebush (*Lindera benzoin*) - Spicebush Swallowtail (*Papilio troilus*)

Hop Tree (*Ptelea trifoliata*) - Giant Swallowtail (*Papilio cresphontes*)

Senna (*Cassia* spp.) - Cloudless Sulphur (*Phoebis sennae*)

Milkweed (*Asclepias* spp.) - Monarch (*Danaus plexippus*)

Monarchs & Milkweeds:

Citizen Science - as a prelude to our newest partnerships through Monarch Joint Venture <https://sesync.org/news/crowdsourced-science>

See what Wild Ones is doing <http://www.wildones.org/citizen-scientist/>

Monarch Joint Venture webinars - "Enhancing Existing Landscapes for Monarchs and Other Pollinators" and more <http://nctc.fws.gov/topic/online-training/webinars/monarch-conservation.html>

An archive of this newsletter is available at: <http://www.missouribotanicalgarden.org/visit/family-of-attractions/shaw-nature-reserve/gardens-gardening-at-shaw-nature-reserve/native-landscaping-for-the-home-gardener/native-plant-school/the-news-from-native-plant-school.aspx>

Tale of the Green Lacewing

by Cori Westcott

Do you ever stop to wonder about a green creature on the screen door under your porch light? It has a tiny head and long abdomen under delicate, tent-like wings. It's a Green Lacewing, known to entomologists as the genus *Chrysopa*, for their golden eyes. For us, it's harmless. But for aphids and mites, the *Chrysopa* larva is a real danger.

This tale doesn't begin with the Lacewing at all. It begins with the Oleander Aphid (*Aphis nerii*). I discovered these sap-sucking little creatures congregating on the stems of my Butterfly Milkweed (*Asclepias tuberosa*). They were fun to observe. I often suspect that the minions from the movie, *Despicable Me*, were inspired by the Oleander Aphids. They're the grazing herds of the insect world. After close observation, I noticed that tiny, strange balloons appeared on their own individual strings!

A pregnant Green Lacewing (*Chrysopa* spp.) had discovered the aphids and knew this was the food source for her babies. She first attaches the string and then secures the egg on the tip. "Why doesn't she save time and simply deposit her eggs in a pile on the leaf," you might ask. Because her larvae (also known as aphid lions) are such voracious eaters, they'll eat each other, and putting them up on a stalk gives them a chance to survive. They look like this... (photo credit MDC)



With its hollow jaws, the Lacewing larva punctures the little aphid and injects a paralyzing fluid that liquefies its internal organs to feed on the bodily fluids. Aphids have their own defense against attack. When an aphid is stressed, its cornicles (little horn-like projections on the hind end) exude an odorous substance that repels predators and warns other aphids of attack. Some survivors will drop from the plant and possibly not be one of the 600 aphids a single lacewing larva will consume.

As voracious predators as these little ones can be, they're also a favorite food item for several other creatures such as spiders and birds, and lest we forget, its own siblings.

How does it protect itself? Meet the "trash bug"! Look closely on the left side of this conglomeration of teeny, tiny plant particles. The lacewing larva attaches shredded debris from its surroundings and camouflages itself. Do you see the familiar set of mandibles hoisting the helpless aphid in the air? It's the same larva pictured elevating that aphid so the fluids run into its mouth.



Now, here's where I have a problem with the whole standard issue scientists have been using for years. Intelligence in animals has been recognized by their tool using skills. Is this not an example of tool using?

Just in case you're curious, it takes about a minute for the Green Lacewing to "drink" all the fluids from one aphid - A very beneficial garden insect indeed!

