

### FROM THE EDITOR

# School may be out, but it's still time to learn

Summer didn't want to arrive in Wisconsin this year. I spent a cold, windy morning on Earth Day clearing trash along the shore of Lake Winnebago. My husband and I picked up a lot of beer cans, fishing lures and bait containers, and homework that never got turned in from the nearby elementary and middle school.

It's all about making a difference, and that is where Wild Ones and its myriad of chapters and

Barbara A. Schmitz

members stand out. They help their communities, educating neighbors, friends, family and others about the benefits of natural landscaping, and how they can make a difference even with topics as serious as climate change.

In fact, one of the best things about being editor of the *Wild Ones Journal* is that I always keep learning more about native landscaping. And in this issue, I learned a lot.

For instance, I've learned jumping worms scare me, and I don't want them on my property. (OK, I knew that before.) But as people become more knowledgeable about this invasive worm, the better off our gardens will be. If you don't live in the 34 states that are currently home to this worm that likes to thrash and turn soil into something that resembles coffee grounds, be sure to read the story on <a href="Page 34">Page 34</a>, especially if your chapter is considering hosting a plant swap or sale.

A similar lesson could be learned from Wild Ones member Andrea Matthies's battle with stiltgrass. In her email to me, Andrea wrote: "The local land stewards keep saying that it is so fortunate that it happened on our land instead of someone less tuned into land stewardship and that community. I get that. But Jim and I could really have done without this. Garlic mustard seems like child's play." Again, educating others about that nasty grass and how to identify it is one of the key ways to stop its spread. Read more on Page 44.

This issue also features monarch news as we continue our 2023 series. Beca Schweitzer writes about some of the insects that can be found on milkweed (<u>Page 16</u>), while Mackenzie Seymour warns that monarch populations will continue to decline if humans don't do anything to stop it. (<u>Page 37</u>).

The need to get children involved in nature and native landscaping is evident. Krystal Coxon describes how she's made her children "investigators" as she helps them see the wonders in their yard. Learn how you can do the same on <u>Page 28</u>.

So, when rain is forcing you to stay inside, get comfy on your couch or sit down with a beverage and enjoy this issue. And better yet, if you have story ideas you'd like to share, email journal@wildones.org. Our members and chapters are doing so much good; help us spread the word!

— Barbara A. Schmitz



Promoting environmentally sound landscaping practices to preserve biodiversity through the preservation, restoration and establishment of native plant communities

#### **NATIONAL OFFICE WILD CENTER**

2285 Butte des Morts Beach Road Neenah, WI 54956 Phone: 920-730-3986 Email: info@wildones.org

# NATIONAL STAFF CONTACT INFORMATION

#### **Executive Director**

Jennifer Ainsworth • 920-730-3986 execdirector@wildones.org

#### **Brand & Communications Manager**

Katie Huebner • 920-730-3986 khuebner@wildones.org

### **Executive Assistant/Membership Coordinator**

Rachel Jaschob • 920-730-3986 rjaschob@wildones.org

### **Education and Program Coordinator**

Sara Ressing • 920-730-3986 sressing@wildones.org

#### **Chapter Liaison**

Lisa Olsen • 920-730-3986 lolsen@wildones.org

### **Administrative Assistant**

Deanna Millard • 920-730-3986 dmillard@wildones.org

#### **IT Manager**

David Kryzaniak • 920-730-3986 david@wildones.org

# BOARD OF DIRECTORS President

Loris Damerow president@wildones.org

### **Vice President**

Open

## Secretary

Rita Ulrich secretary@wildones.org

### Treasurer

Carl Bahneman treasurer@wildones.org

#### **Board General Counsel** Jim Poznak

JIIII FUZIIAK

### **Board Members**

Margaret Delaney, Michigan, 2024
Ken Foster, Minnesota, 2026
Eric Fuselier, Arkansas, 2024
Holly Latteman, Ohio, 2024
Carolyn Miller. Michigan, 2026
David Neu, Illinois, 2026
Leah Pollack, Washington DC, 2026
Jim Poznak, Illinois, 2024
Pam Todd, Michigan, 2026
Sally Wencel, Tennessee, Past President

### **Honorary Directors**

Neil Diboll, Wisconsin, Lifetime Doug Tallamy, Delaware, Lifetime Heather Holm, Minnesota, 2024 Larry Weaner, Pennsylvania, 2025

Established in 1977, Wild Ones is a national not-for-profit organization of members who teach the benefits of growing native plants and work together to grow and restore natural landscapes.

Wild Ones' definition of a native plant:
A native plant is a species that occurs naturally in a
particular region, ecosystem and/or habitat and was
present prior to European settlement.

- Member garden
- Whiting forest
- Milkweed for monarchs
- 19 Sex lives of plants
- Weedman recognized
- Seeds for education
- Sharing nature
- 32 Book review
- 34 Jumping worms

Wild Ones Journal is published regularly by Wild Ones: Native Plants, Natural Landscapes. Views expressed are the opinions of the authors. Journal content may be reproduced for nonprofit educational purposes as long as the *Journal* is credited as the source. Individual articles that carry a copyright are the property of the author and cannot be reproduced without the author's written permission. No artwork may be reproduced, except to accompany its original companion text, without written permission of the illustrator or photographer. Contact editor if in doubt about use rights. Manuscripts and illustrations are welcome; Wild Ones does not pay for articles, photos or illustrations. For guidelines for submitting material, contact editor or see Wild Ones website. Sponsors: Contact Wild Ones National Office for rates and schedule.

WINNER

2020

Copyright © 2023 by Wild Ones.

Online version: ISSN 2472-5900 Print version: ISSN 1551-9155



### - Contributing Writers -

**Wild Ones Journal** 

– Editor –

Barbara A. Schmitz

Karen Ackroff • Krystal Coxon • Laurie Lawlor Andrea Matthies . Heather McCargo Jen Medon • Matthew Ross • Besa Schweitzer Mackenzie Seymour

- Design/Layout -Kevin Rau
- Proofreader -Mariette Nowak



Izel Native Plants is a user friendly e-commerce solution to the challenge of sourcing native plants. We combine the inventories of wholesale growers across the Midwestern and Eastern US and offer over 600 species throughout the growing season.



Rarely sold to customers who are not in the trade, we make plugs available to everybody. They are economical, provide a high ratio of root mass per volume of growing medium, and are easy to install while minimizing the amount of soil disturbance.

izelplants.com

Looking for more ways to make a difference in your yard or neighborhood? Try a pocket meadow. These small renditions of grassland ecosystems are planted with a mix of grasses and forbs, and they are more than just pretty facsimiles of nature. They give us a connection with nature in an increasingly urbanized environment. Pocket meadows create a buffer between us and the built environment.

They also act as green infrastructure, reducing and filtering stormwater runoff. While little bluestem, coneflower, goldenrod, aster, and others mingle in a melange of resilience and beauty, their root systems will amend the poorest of soils over time, helping restore damaged soil ecology. Even small native plantings help sustain biodiversity. Research by Dr. Doug Tallamy and others show that native insects and pollinators find their way towards native plants even when they are growing in isolation.

So find opportunities to add pocket meadows to your landscape. Hell strips—the area between a street and a sidewalk—are places where pocket meadows can make a difference. Replacing lawn areas also offers opportunities to boost biodiversity. Keep only what lawn you need and gradually convert the rest.

Read about pocket meadows and practical steps to create your own in our <u>blog post</u>.











# ACROSS THE NATION

### **COLORADO**

A new solar farm in Colorado will do triple duty as a prairie restoration project, carbon sink and clean power source.

According to <u>Clean Technica</u>, a movement is afoot to

quash utility-scale solar development on farmland in the United States, but the case for rural solar keeps expanding in new and different directions. In the latest example, Lightsource bp has built a pair of solar farms in Colorado that double as carbon sinks and help to preserve 3,000 acres of shortgrass prairie, too.

The basic idea is that ground-mounted solar arrays can provide farmers with income, while the soil beneath gets a rest from agricultural duties for about 25 years or more. The prairie restoration is also expected to <a href="mailto:thwart">thwart</a> invasive species like cheatgrass, which has been blamed for raising the risk of wildfire.

### **OHIO**

In late 2022, the Ohio Division of Natural Areas and Preserves (DNAP) purchased 73 acres rich with rare species and geologic features along Little Beaver Creek in Columbiana County. Little Beaver Creek is a State Wild and Scenic River, as well as a National Scenic River. It is the first river in the United States to earn both distinctions.



Little Beaver Creek Graft Tract Waterfall

According to the <u>Ohio DNR</u>, the new property protects approximately ½ mile of forest corridor along Little Beaver Creek and more than a ¼ mile of a perennial headwater stream. While surveying the property, DNAP biologists discovered a population of the potentially threatened running buffalo clover (*Trifolium stoloniferum*). This sighting is the northernmost population ever recorded in Ohio. The property is also ecologically important as it protects a high-quality tributary headwater stream that contains several salamander species, a

series of small waterfalls and groundwater springs.

The new acquisition is open to the public, but currently has limited access as it can be reached from <u>Little Beaver Creek</u> only by canoe

or kayak.

### **INTERNATIONAL**

ENGLAND — Moths are more efficient pollinators at night than day-flying pollinators such as bees, according to new research from the University of Sussex, published March 29 in *PLOS ONE*.

Amid widespread concern about the decline of wild pollinating insects like bees and butterflies, University of Sussex researchers have discovered that moths are particularly vital pollinators for nature.

Studying 10 sites in the southeast of England throughout July 2021, the Sussex researchers found that 83% of insect visits to bramble flowers were made during the day. While the moths made fewer visits during the shorter summer nights, notching up only 15% of the visits, they were able to pollinate the flowers more quickly, according to <a href="Phys Org">Phys Org</a>.

CANADA — The rapid growth in urban honeybee-keep-

ing over the past decade may be negatively impacting nearby wild bee populations, new research shows. Small bees with limited foraging ranges may be especially at risk, researchers said.

The <u>Concordia University</u> researchers compared bee population data collected from sites around the island of Montreal in 2013 to data they collected at the same sites in the summer of 2020.

"We found that the sites with the largest increase in honeybee populations across sites and years also had the fewest wild bee species," says Gail MacInnis, a former Concordia postdoctoral researcher and the study's lead author.

According to Quebec's Ministry of Agriculture, Fisheries and Food, the num-

ber of honeybee colonies on the island of Montreal has increased over twelvefold. In 2013, there were under 250 colonies. That number ballooned to almost 3,000 in 2020.

Honeybees are not native to the region. This type of bee is therefore in competition with almost 180 other species for resources like pollen and nectar, the researchers said.

Read more.







Photograph courtesy of Jessie Crow Mermel

# Wild Ones Rock River Valley Chapter

Helping to save the federally endangered Rusty-Patched Bumblebee.

Do your part by planting native bee food plants.

For more information: https://www.wildonesrrvc.org.

# Invest like you garden...



# with the planet in mind.

Learn more about Sustainable & Responsible Investing.

**Allegheny Financial Group** 

Trina Brown, CFP®, CSRIC®

CERTIFIED FINANCIAL PLANNER™ Practitioner and Chartered SRI Counselor™
412.536.8005 • tbrown@alleghenyfinancial.com

Allegheny Financial Group is a Registered Investment Advisor. Securities offered through Allegheny Investments, LTD, a registered Broker/Dealer. Member FINRA/SIPC.





Growing Native Grass and Wildflowers Since 1980



Over 200 species in production: Individual Species • Restoration Seed Mixes Native Plug Packs



# Call or Online

www.allendanseed.com

allendan@allendanseed.com

Ph: (515) 462-1241



By Barbara A. Schmitz

A native garden is a work in progress, Dave Neu says, with the plants teaching you where they want to be.

Neu, owner of NatureSpace LLC of Libertyville, Illinois, says he's constantly learning which species can be aggressive and which ones are well-behaved. And those experiences help him not only create better land-scape designs, but also planting lists.

"I've learned zigzag goldenrod (Solidago flexicaulis) is very aggressive," Neu says. "I started with three plants in a shaded area, and they have pushed everything else out in half of the backyard."

This summer, Neu plans to thin out the goldenrod and plant some blue mistflower (*Conoclinium*  coelestinum), which can also be aggressive.

"I figure the two plants can fight it out," he says. "Also, there is virgin's bower (*Clematis virginiana*) covering an 8-foot trellis/wall that has outgrown its welcome. I am constantly pulling up little vines throughout the garden."

Neu says he plans to move those clematis plants to the back fence, and plant passionflower vines (*Passiflora incarnata*) in their place on the trellis. He acknowledges that passionflower is a bit out of its range, but figures it is worth a try. Neu says after learning which plants tend to self-seed a little too readily, he has gotten better at clipping off seed heads before the seeds disperse.

Neu says he became interested in native plants as a child exploring

the forests and lakeshores of northern Wisconsin.

"I have a degree in wildlife management, biology and resource management, which led to a long and varied career in natural resources," he says. "I've planned, restored and managed tens of thousands of acres of native habitat throughout the Midwest. Beginning with my parents' backyard when I was in college, I've utilized native plants in the landscape of every place I've lived."

He encourages those new to native landscaping to start small, just as he did on his own property.

"I first removed the nonnative invasive species such as burning bush and Japanese barberry, then I removed the Japanese yews from the foundation planting," he says. But he and his wife decided to keep some



All photos courtesy nonnative and non-invasive plants, such as irises, peonies and hydrangeas, which they moved to the side of their house in an area they call their "Secret Garden."

They worked on their backyard first, and then the front yard. The backyard has a rain garden, sunny prairie species and a shaded woodland area. There is also a small tiered pond, about 6-feet by 3-feet at the bottom section and 2-feet by 3-feet

at the top section, with native emergent species in containers.

The pond — an addition to the yard done for Lisa —has been a magnet for wildlife. It has been home to green frogs, bullfrogs and American toads, Neu says, and a lot of birds use it, as well as his birdbath.

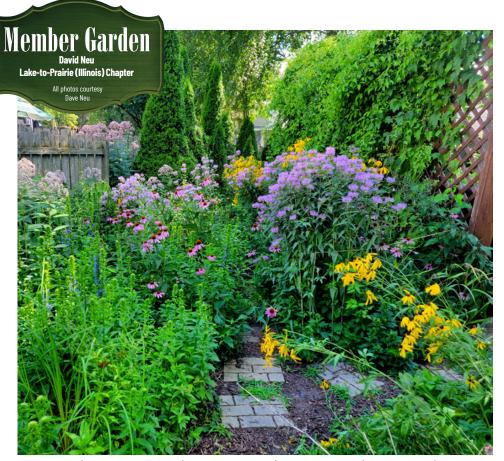
The front yard has mostly low growing native shrubs and herbaceous species, and a patch of lawn



Virginia bluebells (Mertensia virginica), left, and Eastern redbud (Cercis canadensis) add color to the Neu yard each spring.

# About the property

- · Dave Neu and his wife, Lisa, moved into their Libertyville, Illinois home in August 2015, and began converting much of the property to natives that fall and in the spring of 2016.
- · To date, they have converted over half of the backyard and about half of the front yard to natives. And they are not done yet. At his last count, he had about 120 native species and thousands of native plants.
- Dave says choosing his favorite plant is like choosing his favorite child. "But, if I had to pick some, I would say Virginia bluebells (Mertensia virginica) and purple poppy mallow (Callirhoe involucrata). The bluebells are a welcome sight in the spring and the purple poppy mallow is such a cheery plant that fills in between other plants and has a long blooming time."
- The backyard has a rain garden, sunny prairie species and a shaded woodland area. There's also a small pond with native emergent species in containers. The front yard has mostly low growing native shrubs and herbaceous species, and a patch of lawn in the middle to give it what Neu calls the "aura of maintenance."
- Neu has his own native landscape design business, NatureSpace LLC.



Joe pye-weed (Eutrochium purpureum), purple coneflowers (Echinacea purpurea), wild bergamot (Monarda fistulosa), yellow prairie coneflowers (Ratibida pinnata) and others provide color to the Neu yard each summer.

in the middle. Neu said he hasn't had any neighbors complain about his front landscaping, but he does keep it more orderly than the backyard so it is obvious that it is intentional.

He also has a Conservation at Home sign and a NatureSpace sign that make it obvious that the landscape is native. It's been the lone oasis for wildlife in his neighborhood, with thousands of native plants and more than 120 native species.

But that's about to change. One neighbor has asked Neu to design his landscaping, meaning there will soon be two homes with native plants nearby.

While Neu definitely prefers native plants, he believes people shouldn't feel guilty keeping nonnative plants that they like, as long as those plants are not invasive or harmful in some way, such as a cultivar that might interact with the native gene pool or an invasive burning bush.

He also encourages those new to native plants to not be intimidated and feel like they have to do everything at once.

"Start with the tried-and-true entry-level native plants like purple coneflower (*Echinacea purpurea* ) and butterfly weed (*Asclepias tuberosa*) and then tuck in other plants as you get more experience," Neu said. "Don't forget about native grasses and sedges; they're important, too."

Also be sure to look at your yard and notice what areas get more sun, what types of soil are where and which sections are more wet. "There's a plant for every situation, but not every situation fits every plant."

Neu says he's been amazed by the number and species of insects that have found their yard since they converted it to natives. They're visited regularly by butterflies and moths such as tiger swallowtails, red-spotted purples, monarchs, clearwing hummingbird moths and skippers, as well as by many species of dragonflies, bees and other tiny pollinators "that make the garden hum with activity throughout the growing season."

They also commonly see birds such as ruby-throated humming-birds, goldfinches, cardinals, house wrens, chickadees, warblers, robins, thrushes, mourning doves and the occasional Cooper's hawk. "And as far as mammals go, cottontail rabbits are everywhere!" he said, as well as skunks, opossums, gray squirrels, chipmunks, mice and the occasional coyote and red fox.

Neu says there isn't one particular thing or plant that all native landscapes should include, although some native or habitat garden certification programs require a water source. But you should try to pick out groups of plants that will bloom throughout the growing season or provide year-round interest.

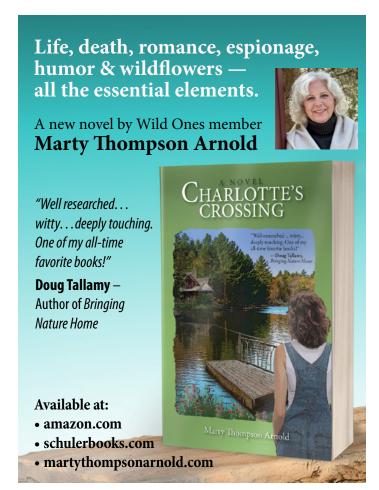
You also need to be patient as the plants take a while to grow and fill in. He recommends purchasing plugs vs. gallon containers to save money. Matrix planting with grasses and sedges can also speed up the filling-in of garden beds and keep weeds down, he adds.

And don't get too worried if the plants don't want to grow where you put them.

"Remember, the plants will tell you where they want to grow," Neu says. "Our yard is constantly changing. When I look back at pictures from previous years, it's amazing the difference as plants fill in."

Editor's Note: We'd like to feature members' native gardens, large or small, in upcoming issues. If you're interested in sharing your native garden, send four to six high-resolution photos, as well as a brief description, to journal@wildones.org. Please include your contact information so we can follow up.









NatureSpace
creates habitats in
harmony with
nature that
provide lush,
beautiful
sanctuaries for
landowners and
wildlife.

- · Native Landscape Design & Installation
- Environmental Consulting
- Wildlife Habitat Planning

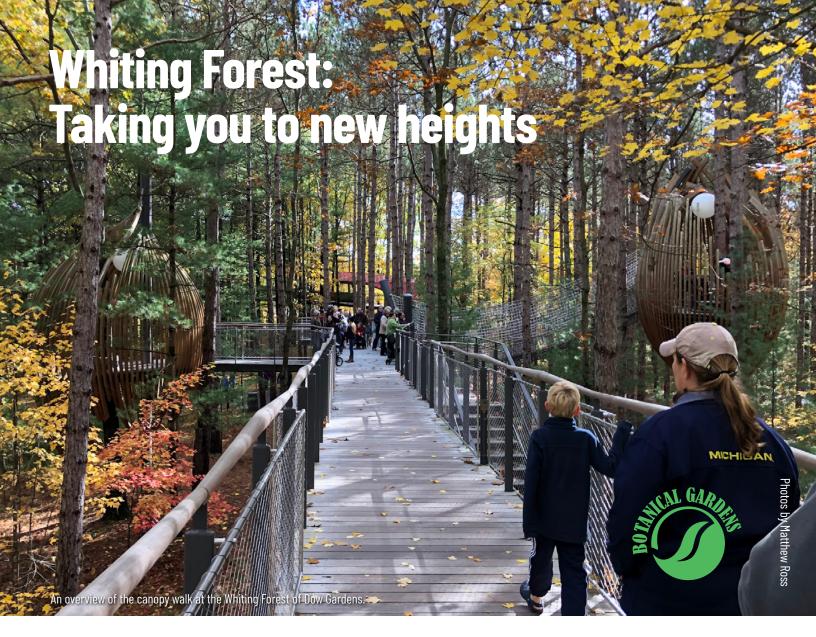
www.naturespacellc.com

Dave Neu owner

daveneu30@gmail.com

Serving NE Illinois and SE Wisconsin





### By Matthew Ross

Those of you who have been to Midland, Michigan may have had the pleasure of strolling through the elaborate gardens, intricately designed vignettes and forward-thinking architectural elements that comprise the historic landscape of Dow Gardens.

Established right before the start of the 20th century, the picturesque landscape was a labor of love for Herbert and Grace Dow. The pines and the gardens developed by the Dows have stood the test of time and influenced future generations of gardeners in their community and public horticulture professionals from across the nation.

While much of the 110-acre

estate and National Historic Landmark property features swaths of flowering bulbs, annuals, conifers and a tropical conservatory, there is also a deep connection to the surrounding landscape that is often overlooked. Over the past decade, their commitment to the adjacent woodland of Whiting Forest and restoration efforts along Snake Creek have elevated their presence locally, regionally and nationally.

Far too often we take our native trees and woodlands for granted. While the trees provide an abundance of shade on a hot summer day or a picturesque backdrop during an autumn hike, it is hard to truly experience how much life there is high above us in the canopy. Following the devastating loss of

the ash (Fraxinus) forest, significant streambank erosion and increased upstream pressure on the watershed, there was a need for Dow Gardens to redevelop the Whiting Forest and Snake Creek portions of their property. The nationally acclaimed Landscape Architect Jonathan Alderson was commissioned and the work began. Collaborating with the horticulture team at Dow Gardens, they have designed, installed and maintained a new feature that provides a deeper connection between the Garden's core and the adjacent woodlands that has literally elevated the guest experience.

The unveiling of a 1,400-footlong, three-tiered walkway has been an absolute game changer for



Author Matthew Ross appreciates the view from 120 feet above the ground on a three-tiered lookout tower at Holden Arboretum in Kirtland, Ohio.

visitors to the forest. Not only does it present a unique vantage point for viewing the understory, but it also gives one a new perspective on life 40 feet high in the canopy. Through the innovative and intentional design there is no shortage of experiences and surprises.

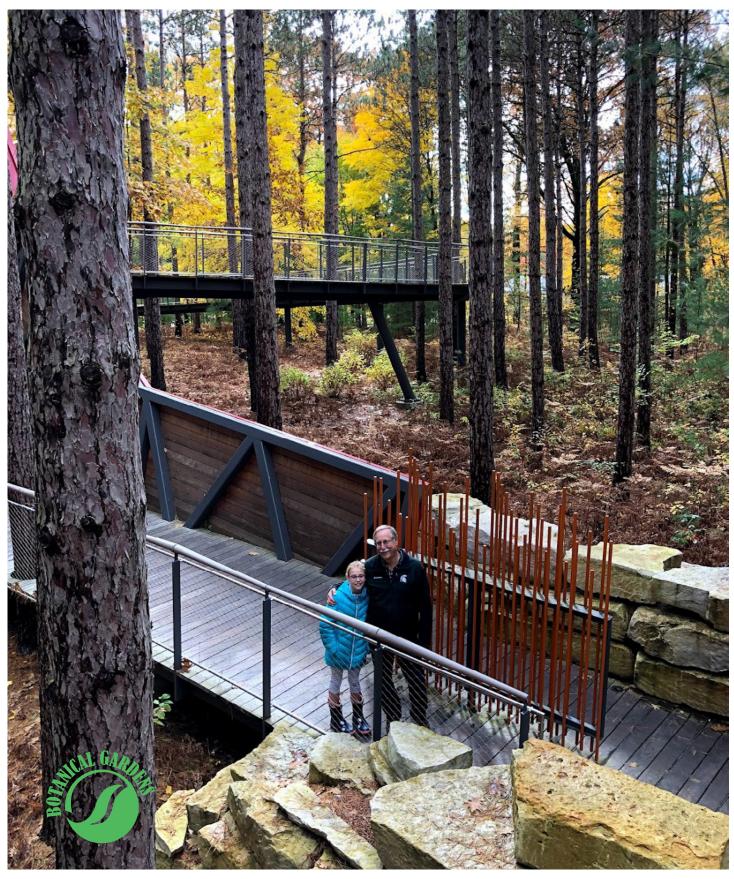
I first visited the walkway during peak fall color with my family. We were quickly immersed in the ambers, oranges and bright yellows of beech, birch and maple trees; needless to say, it was breathtaking. My young niece and nephews had a blast traversing the rope ladders to artistically constructed pods and eventually resting in the giant hammocks.

I recently revisited the walkway at the start of spring as the very first buds began to swell. Even without the colorful backdrop, there was an essence of awe strolling through the nation's longest canopy walk. In addition to the walkway there is a series of different featured plantings including the orchard overlook, which pays homage to the historic orchards of the region, an amazing, layered meadow at the entrance, and a wet meadow adjacent to a diverse replanting of Snake Creek.

Restoration efforts to overcome the challenges of the loss of the ash forest and pressure from more frequent and severe flooding included the planting of 34 different species of native trees along the stream bank.

The ebbs and flows of the plantings over the past few seasons offer fellow gardeners and environmental professionals a chance to see a real-life example of designing for resilience. I look forward to watching the planting mature and seeing which species are most apt to survive in a changing environment.

Dow Gardens is one of many public gardens that has looked for innovative ways to extend their gardens into the natural areas that surround them. Longwood Gardens in Kennett Square, Pennsylvania, for example, has developed three treehouses, including one that overlooks the expansive native meadow, while The Holden Arboretum in Kirtland, Ohio, constructed the Murch Canopy Walk 65 feet into their expansive canopy and a 120-foot tall Emergent Tower that sets you high atop the thousands of trees in their expansive natural lands. I look forward to seeing the trend of providing visitors a chance to deepen their appreciation for the beauty of our native woodlands and having more people elevate their passion for the canopy! Matthew Ross is a former Wild Ones Board member, member of the Wild Ones Grand Traverse (Michigan) Chapter and executive director of <u>The Botanic Garden at Historic Barns</u> <u>Park</u> in Traverse City, Michigan. Below: Glass sculptures at points of interest help guide visitors through the experience and mirror the vertical habit of the upright fronds of the ferns and shrub layer in the background at Whiting Forest of Dow Gardens.

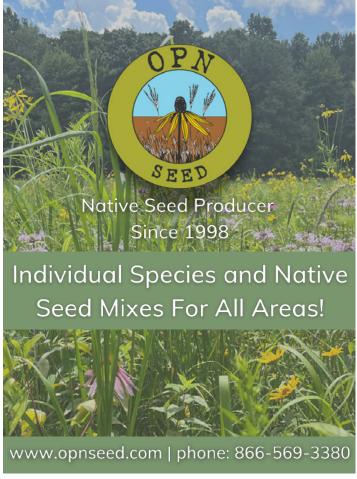


• 14 • Wild Ones Journal • Summer 2023 • Vol. 36, No. 2 • wildones.org











# This milkweed was planted for monarchs

# But so many others visit in this circle-of-life saga

All photos by Besa Schweitzer



By Besa Schweitzer

My neighbor planted a swamp milkweed (*Asclepias incarnata*) on the edge of her patio to attract monarchs (*Danaus plexippus*) to her yard. Swamp milkweed may be their most preferred food source of the milkweed genus, which the monarchs depend on during their caterpillar stage. This specimen grew to be about 4 feet tall and about as big around. The flowers bloomed, but the monarchs didn't come.

As I told my neighbor, it often can take time for an adult monarch to find a new source of host plants. Allowing the plant to become well established before the caterpillars begin feeding is better than freshly emerged seedlings being eaten to the ground by a very hungry caterpillar that showed up early. But eventually, the monarchs will arrive, seeking out each milkweed to serve as the host plant for a new generation.

Instead of attracting monarchs, however, the milkweeds' leaves first began to be colonized by aphids. The orange aphids are milkweed aphids (*Aphis nerii*), an introduced species from the Mediterranean that clones itself instead of reproducing sexually. Milkweed aphids store the cardiac glycosides produced by the milkweed plant. Their bright orange/yellow warning coloration serves to warn predators that they are poisonous.

When aphids colonize a plant, many gardeners first — and mistakenly wrongly — reach for insecticides. But when you are gardening for monarchs, insecticides, even organic insecticidal soap, would kill the very species you are trying to attract. Other common solutions to aphids are to spray them off with water or manually squish them. But my advice to my neighbor was to just leave them alone, let the food web naturally form, and the predators will come. Of course, it is very



hard to watch a plant you have nurtured from a seed be damaged by an invasive aphid, sucking all of its life fluids. But patience can bring exciting results.

A few days later we were having coffee on her patio with the attacked/suffering milkweed standing nearby. The aphids were still present in force, but now there were also a few black and orange striped lady beetle nymphs (*Coccinellidae*) systematically piercing aphids to suck them dry and leaving a path of dead aphids behind. On closer inspection we found golden eggs clustered under the leaves in tight formation where the lady beetles had emerged.

More pale eggs nearby were suspended on threads; these are the eggs of the aphid lions (*Chrysoperla* sp.) They are born so ferocious that their parents must separate them at

birth on their own threads to make sure that they don't eat their siblings. Aphid lions look like little alligators snapping up aphids in their tiny, but strong jaws and mature into delicate green lacewings.

We also found flower or syrphid fly's youngsters (*Syrphidae* spp.), which are white, pointy-ended maggots that parasitize aphids causing them to turn brown. When the maggots become adults, they are important pollinators of the plant they just protected from aphids. And, jackpot, under a leaf was the tiny crystal meringue of a monarch egg.

Now that the predators have arrived on site the milkweed plant is feeling some relief from the aphids. But now our monarch babies may also be in danger as predators do not know to avoid the endangered species when they are feeding. Monarch



A freshly emerged lady beetle sits on its larval exoskeleton as juicy aphids surround it.





caterpillars concentrate the cardiac glycosides from the milkweed plant in their bodies and even retain this deadly chemical in their adult butterfly form, making them distasteful to predators. Many of the species dependent on milkweed as their host plant have learned to work around or even co-opt the chemicals the milkweed plants have developed to protect themselves from predators.

Soon the monarch caterpillars hatch. They are easy to spot by the damaged leaves. Flip one over and a tiny striped monarch baby will be busily munching underneath. The caterpillars seem to double in size overnight; we checked on them daily and marveled at their growth. The adult butterflies were also seen visiting the garden more often, laying even more eggs. My neighbor was relieved that the butterflies found her garden a suitable place to start a family. The life of a butterfly is not easy, and mortality is high out in the wild, even when you are a monarch.

As the food web develops around

the milkweed plant, larger predators arrive. Flower crab spiders, (*Misumena* sp.), stand guard on the flower head to nab unwary visitors, changing their color to match the flower for camouflage and ambush their prey. Praying mantises (*Stagomantis carolina*), dangle from the stem, grabbing bugs and beetles as they are distracted by the aphid harvest.

Visiting pollinators may also be captured. Although it is all part of the food web, it can be hard to watch a butterfly being eaten as its torn wings drift slowly to the ground. I find it amusing, in a morbidly necessary way, that the aphids pierce the plant to suck out the sap, and in turn the aphids are pierced by their predators, which suck out the aphids' body fluids. The whole system is like one complicated straw, sucking nutrients upward out of the air and soil from plant to insect, until a bird comes along and plucks an unwary predator and stuffs it into a chick's mouth.

Who needs TV when you can sit near a swamp milkweed and watch

battles rage from stem to stem, birth and death, eggs becoming nymphs becoming adults, so many different species doing what they do best. Plants are eaten by aphids, then eaten by beetles, who are eaten by mantises, in turn then eaten by birds, who then disperse to far corners and eventually be eaten themselves. Eggs are carefully laid on a selected host and hatch, eat and grow. The lucky few that avoid predation become adults to start the cycle over again. We could (and do) sit here for hours. fascinated by the drama in front of our eyes. This milkweed was planted to attract monarchs, but it has summoned an entire ecosystem.

Besa Schweitzer is a native garden specialist with over 20 years' experience gardening with native plants. She is also the author of "The Wildflower Garden Planner," an interactive guidebook to native landscaping in Missouri. Besa is a member of the Wild Ones St. Louis (Missouri) Chapter. Read her blog at <a href="https://besaschweitzer.wixsite.com/growswild/blog">https://besaschweitzer.wixsite.com/growswild/blog</a>.

# Flowers, pollinators and the sex lives of plants



by Heather McCargo

The warm, sunny days of midsummer are a great time to observe the many kinds of pollinators that visit flowers. Pollinators could include the ruby-throated hummingbird and a variety of insects, such as butterflies, moths, native bees (about 4,000 species nationwide), honeybees, flies and beetles. Some of these pollinators are colorful and showy, while others are tiny and may require quiet observation before you see them.

In natural areas, meadow, seaside and wetland plants are most floriferous in the summer. Garden plants such as annual flowers, herbs and vegetables, many of which are from tropical or Mediterranean climates, also bloom in the summer, when the temperature is most similar to their homeland. Spend some time really looking at a variety of flowers in the wild, in your garden or in the shopping center parking lot and notice if pollinators are visiting those plants.

## The sex life of plants

Because plants are not mobile, they are dependent on pollinators to aid in the transfer of pollen (plant sperm) from one plant to another to produce offspring that are genetically diverse individuals. Each of these individuals will vary in their ability to deal with conditions such as drought or extended rainy weather, excessive heat or cold, and even pollution. In the wild, a healthy plant population successfully pollinated will result in many diverse offspring, some of which will hopefully have traits that help them thrive in the given environment.

Flowers are a plant's instrument of sexual reproduction, and their appearance is shaped by a plant's relationship with its pollinators. The



Swamp milkweed (Asclepias incarnata) with fritillary

petals serve as a visual flag and landing pad. As the pollinator reaches the nectar source (the attractant), it bumps into the sex organs of the plant (stamens and pistils). Pollen sticks to its body, and the pollinator transfers the pollen to other flowers. Plants that are wind pollinated, such as grasses and many tree species, tend not to have colorful flowers. Instead, they produce a lot of pollen in the atmosphere (aggravating some people's allergies) and rely on the wind to carry it to other plants.

### **Sexually dysfunctional plants**

Not all flowering garden and landscape plants attract pollinators. There are a variety of reasons for this: If the plant is from another part of the world, it may have evolved to work with a pollinator that does not exist here, and its flower parts may be so specific to this pollinator that none of our native insects or hummingbirds fit with its design. Another reason garden plants may not attract pollinators is that they have been bred for traits that are attractive to gardeners but that inhibit the plant's ability to sexually reproduce, such as double flowers.

In plants with double flowers, the stamens and pistils have mutated to look like petals. These flowers are sexually dysfunctional; without stamens, pistils or nectar, the plants do not attract pollinators or produce seeds, the result of sexual reproduction. Furthermore, the pollinators, birds and other wildlife that depend on fruits or seeds receive no nourishment from these plants.

# Plant reproduction without sex—cloning

Because these varieties do not produce seed, they are propagated through asexual reproduction. Until recently, this was done by dividing the root system or cutting the growing tips of stems, which will produce roots if maintained in a moist environment. Today, these plants are



Double echinacea

often cloned in a laboratory with a process called tissue culture. Cells from the desired plants are removed and grown in a petri dish until they divide and form new genetically identical plants. There is a trend today to give a trade name to these plants and even patent them so that their reproduction is controlled by the patent owner and individuals cannot propagate them.

# Garden plants and food crops that do attract pollinators

Plenty of exotic garden plants do attract pollinators. Many herbs have flowers that have not been altered by domestication or breeding. Dill, parsley, cilantro, chives, marjoram, sage and rosemary all have flowers that attract pollinating insects and are not invasive. There are also many annual and perennial flowers that attract pollinators to their nectar-filled blossoms such as lavender, nasturtium, calendula, marjoram, zinnia, catmint, breadseed poppy, cosmos, sunflower, coneflower, clover, borage, beebalm, fuchsia and many others. If you want to add these plants to your garden, look for single rather than double forms.

# Native plants for year-round pollinator support

While these garden plants are a great source of nectar for the but-



A New England aster (Symphyotrichum novae-angliae) with bee.

terflies, bees and hummingbirds, the pollinators are still dependent on the foliage of native plants for the caterpillar or larval stage of their lifecycle, and on the leaf litter, stems or bark for overwintering habitat. It is well-known, for example, that monarch butterflies depend on native milkweed for their reproduction and growing caterpillars.

This interdependency is not unique—all native plants have coevolved with pollinators. The tiger swallowtail butterfly, for example, needs native deciduous trees and shrubs such as birch, cherry and spicebush to raise its young. Luna moths feed in the canopy of native

trees during their caterpillar stage but drop down to the leaf litter in the fall to overwinter. Rake those leaves away and the luna moth is gone. Many native bees are solitary creatures and lay their eggs in the hollow stems of dead branches or dry flower stalks. A landscape that is overly tidy removes year-round habitat for these creatures. Because they support the whole life cycle of the pollinator, it is important to include native plants in all our landscapes and to relax our landscape style to provide safe places for these important players in each ecosystem.

## Mowing and pollinators

If you can, delay your meadow mowing until late in the season. Your meadow will not re-

turn to forest in one season, and left un-mown, it will have butterflies, bees, lightening bugs, birds, reptiles and all those creatures who live out their life (eat, procreate, raise their young) during the growing season. You can mow paths through it for ease of walking. Many of the seeds of our native meadow wildflowers ripen well into November and, if they are left standing, they have the best chance of dispersing and will feed birds and small animals over the winter. For perennial and shrub beds, leave dried stalks and seedpods standing and let the leaves rest where they fall to provide protection for the numerous creatures that make the leaf litter their home.

Heather McCargo is the founder of Wild Seed Project, a Maine-based nonprofit that encourages the use of native plants in all landscape settings to expand wildlife habitat, support biodiversity and build climate resilience. To accomplish this mission, Wild Seed Project sells seeds of native plants, produces an annual publication, educates the public through its programs and website, and promotes Rewilding in Northeast landscape.







LAKES PONDS WETLANDS
PRAIRIES FORESTS STREAMS



We can help you! Cason Land & Water Management offers services to improve the habitat on your property:

- Aquatic, Upland, and Prairie Planting
- Wildlife, Swimming, & Fishing Pond Design and Construction
- Professional Herbicide Application
- Forestry Management
- Brush Mowing & Tree Falling
- Warm & Cold Water Stream Improvement
- Fish Surveys & Stocking Management
- Wetland Restoration

Contact us to learn more!

# Do You Own Land?

Want to improve hunting, fishing, and wildlife habitat on your land?

877-309-8408

www.casonassociates.com info@casonassociates.com



# Weedman awarded for efforts to restore abandoned lot into natural paradise

By Laurie Lawlor

Jean Weedman is a remarkable leader, environmental educator and native plant enthusiast who has devoted more than a decade to create and sustain an impressive community effort: the Eagle Nature Trail located in southeastern Wisconsin in the small village of Eagle. A lifetime Wild Ones Kettle Moraine Chapter member, Weedman was awarded the 2022 Southeastern Wisconsin Invasive Species Consortium (SEWISC) Sweat Equity Award in November 2022 in acknowledgement of her energetic efforts at the trail site to restore prairie, woods and an ephemeral pond.

The story of the Eagle Nature
Trail began in an inauspicious place
— an overgrown, 8-acre municipal
lot filled with garbage and invasive
species. The tangle of buckthorn,
box elder, dame's rocket and garlic
mustard had become so thick over
the years that no one knew what was
inside the property located between
Eagle Elementary and the Alice Baker Memorial Library.

But in autumn 2009, a group of volunteers decided to do something about the safety of students traveling by bike or on foot from school to the library. No sidewalk lined School Road, which was often busy and especially dangerous during icy winter conditions.

Why not cut a trail through the 8 acres? Once the trees were cleared, this place would be a perfect soccer field. A playground, someone else suggested. What about a garden with donated plants from people's yards?

Weedman, a veteran educator, had a bigger, better idea.

Fascinated by native plants since

the late 1980s, she decided to do a reconnaissance mission to see what was inside this forgotten wilderness. Just when she was about to give up, she later recalled, she made a surprising discovery. A single but spectacular purple coneflower (*Echinacea purpurea*) and several scattered hoary vervains (*Verbena stricta*) with pencil-thin flowers.

These native plants might be proof that prairie once thrived here,



Elementary students head out with garbage bags to pull and remove invasive species on the Eagle Nature Trail property in 2019.

Weedman thought. Then along the edge of the trees was another surprise — two woodland natives, thimbleweed (*Anemone virginiana*) with its distinctive thimble-shaped seed heads turning cottony, and the unmistakable deep purple clusters of black elderberries (*Sambucus canadensis*).

Curious about what else might be discovered, she began to create a plant inventory for the committee that had been organized to create a pathway. She returned to the vacant lot with Jerry Ziegler, who was a long-time, southeastern Wisconsin land steward with The Nature Conservancy. As they made their way around litter and thick invasives, they suddenly heard something astonishing. Frog song. The sign of a healthy wetland. Something hidden still flourished here despite the land's neglect.

"The noise was a wonderful surprise," Weedman recalled.

Ziegler and Weedman hurried across soggy ground and found a clearing that held a rare form of wetland called an <u>ephemeral pond</u>. This type of pond is home to fast-breeding amphibians and nearly microscopic creatures called fairy shrimp. Without a connection to a spring or a stream, an ephemeral pond depends on snowmelt and rain. Because ponds dry up in summer, they can't support fish. Without hungry fish, frog eggs have a chance to grow into tadpoles.

On their hike back that day, Weedman found more native woodland wonders: emerging Solomon's seal (*Maianthemum stellatum*) and the first unfolding heart-shaped leaves of blue and white violets (*Viola sororia* and *Viola canadensis*).

The abandoned lot was not a dead zone after all.

"Forensic" ecology research with soil charts, photos, early surveyor notes and aerial maps revealed that this piece of land was once part of a vast prairie with nearby oak openings and an ephemeral pond. Would it be possible to restore this place to its former health, beauty and diversity?

Now the hard work began —

convincing the committee, coming up with a mission statement and a new plan to showcase three restored, interdependent ecosystems.

Weedman was undaunted, despite having only a bare-bones budget and a loosely affiliated group of community volunteers. The Eagle Nature Trail, however, began to take shape. A growing network of supporters — everyone from local volunteer firefighters, principals, high school and college students and Boy Scouts —pitched in to clear invasives, cut buckthorn, grade the trail

and plant native prairie, woodland and wetland species.

Native restoration is local, hopeful work that requires "sweat equity" of the most important kind. Through it all, Weedman helped lead, manage, inspire and push ongoing maintenance and stewardship with help from many different people and in-kind donations from a wide range of businesses.

Today the Eagle Nature Trail serves as a pathway between the local elementary school and library. The trail also helps connect artists and

citizen scientists, community readers and explorers, teachers, students and their peers as an outdoor classroom.

"Sometimes restoration work seems like a long, slow slog," said Weedman. "Other times I look back and think about how closely we've managed to stay with our original mission. I always feel encouraged when I see young kids arrive on the trail and get excited about nature and then come back later in high school or college to volunteer. We never know whose attitudes about the environment we've helped change."

# 'Labor of love' inspires book on nature trail

By Barbara A. Schmitz

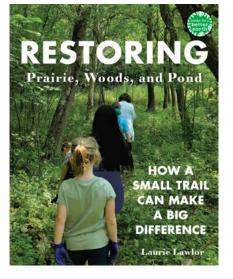
Laurie Lawlor has written more than 40 books, both fiction and non-fiction, including many for children. But when she heard from a mutual friend about a trail created by lifetime Wild Ones member Jean Weedman, she knew the story needed to be told.

"When I finally got the chance to go there and walk the trail, I became inspired," Lawlor said. "It was a wonderful spot ... and a labor of love that Jean has been spearheading for 10 years."

The Eagle Nature Trail, which goes from an elementary school to the local public library in the town of Eagle in southeast Wisconsin, is on an 8-acre parcel that once was filled with garbage. Years ago, underneath a host of invasive species, Weedman discovered some native plants on the property, and knew that with work it could be restored to its original state of three ecosystems — wetlands, prairie and an ephemeral pond.

Not only has the land been restored, but it has become an openair classroom. What really inspired Lawlor to write the book is that all the work was done by volunteers from many different backgrounds.

"They weren't the tree hugger



type; they were people like firemen to principals to farmers..." she said.

Lawlor said she most enjoyed doing the research while writing, "Restoring Prairie, Pond and Woods: How a Small Trail Can Make a Big Difference," which was published by Holiday House on Earth Day 2023. "It was an unusual project for me because I was combing through archival information from libraries and historical societies. I looked at surveyor maps, journals, photographs and diaries to learn more about the property."

She first learned how the terrain was created going back to the <u>lce</u>
<u>Age</u> and how the indigenous peoples used it. Then she started doing inter-

views with all the people involved in the project and taking photographs of the children who helped to pull out invasive species and plant native plants.

Lawlor said the last half of the book shares children's observations of nature. "As a writer, I was interested in how children became inspired from being outside," she said, noting that the property has become an outdoor classroom where students write nature poetry, create nature-inspired artwork and much more.

Lawlor said her 90-page book is for readers from ages 10 to 90. While not a picture book, it is filled with color photos and is designed to inspire both children and adults. But mostly, it's meant to tell them that they can do something like this in their own community.

It is part of the Books for a Better Earth series, which includes stories about positive things people are doing to help the planet and combat climate change.

"If you're getting muddy and taking care of plants, you have a different relationship with Earth itself," Lawlor said. "It's a different experience than looking at nature through a video screen. In person, it has a much more profound effect."

# SFE grant helps students learn that native plants can restore, protect Earth



Russo/McEntee Academy in San Jose, California, overhauled its school garden thanks to a Wild Ones Seeds for Education (SFE) grant, which has helped their elementary school students learn that using native plants is a part of restoring and protecting Earth.

Project Coordinator May Toliao said the project involved weeding, removing existing vegetation, rocks and debris, and then planting native plants.

Milkweed, yarrow, manzanita, baccharis, sage, lamiales, monardella and others were planted in March 2020, Toliao wrote in their SFE final report. Students and volunteers have helped maintain the garden since by watering, removing weeds, edging the beds and adding dirt as needed, she said.

She said about 100 young students learned the importance and benefits of native plants, grasses, trees and shrubs. "They watched videos, participated in classroom discussions, researched native plants for the school's ZIP code and shared their findings through art and oral presentations," Toliao wrote.

In addition, after the students

learned about the benefits of native plants and how they would attract butterflies, moths and birds, there was a high level of engagement to research plants, grasses and shrubs for the school, Toliao said.

"They used technology for research, drew pictures and presented their selections orally to their classmates," she said. "But we think that the biggest impact this project has made is the students' understanding of how the act of planting native plants is ... part of restoring and protecting our planet. As our school transitions to environmental justice



Work days were popular with students who enjoyed being outside and working with gardening tools, plants and dirt.

and sustainability, it truly aligns with our mission to create lifelong environmental stewards."

Toliao said the garden has impacted their school in a positive way by teaching students the long- and short-term benefits of native plants.

"It was wonderful to hear that the students were taking the information home and sharing it with their families," she said. "A surprising outcome was the level of excitement the children had when they were given the opportunity to go outside and work with gardening tools, dirt and plants. In today's classrooms, it is more common to deliver material and information via technology and through discussion inside the walls of a classroom. So, when students were able to take what was learned inside, to the outside environment, it

was that much more powerful."

Overall, she wrote that the project went well, except for the timeline, which had to be changed due to inclement weather and individual schedules of staff members.

Their main challenge has been getting families to volunteer to manage the garden when teachers are in class or during the summer when school is not in session. "We have a small core group of parent volunteers, and we are looking forward to bringing in more volunteers..." she said.

With the school now having an emphasis on environment justice and sustainability, they hosted a launch night and invited community members, families and students to come in and learn more about the school's goals while also showcasing

the garden and students' environmental projects.

The school already has plans to expand its school garden; they plan to build raised planters to grow various fruits and vegetables, create an outside classroom area where all classes can enjoy a weekly block of time to learn in a natural setting, as well as a tranquil environment where students can sit during their recesses, she said.

For other schools thinking of undertaking such a project and applying for a Wild Ones grant, Tolio recommends that they ensure the native plants that are listed in the application process are in stock in advance, and work with other teachers to take photos and record video to share with the project coordinator.



# Missouri Wildflowers Nursery



- ✓ Over 400 species.
- ✓ Flowers, grasses, trees, shrubs, vines, sedges, and pond plants.
- ✓ Plants for full sun, full shade, and everything in between.
- ✓ Seed, seed mixes, and custom blends.
- ✓ Potted plants starting at \$2.75.
- ✓ Expert advice.
- ✓ Contact us for our outstanding free catalog!

## www.mowildflowers.net

573-496-3492, fax: 573-496-3003, mowldflrs@socket.net 9814 Pleasant Hill Rd, Jefferson City, MO 65109



# **Located in NE Ohio**

- High-quality trees, shrubs, perennials, and wildflowers
- Project specific orders welcome
- Plugs and pots ideal for large scale restoration and CRP projects
- Rain garden kits available







LOCALLY
GROWN IN THE
MIDWEST

150+ NATIVE SPECIES TO CHOOSE FROM! PLANTS AVAILABLE MAY - SEPTEMBER

## SHOP OUR WIDE SELECTION & PLACE AN ORDER:

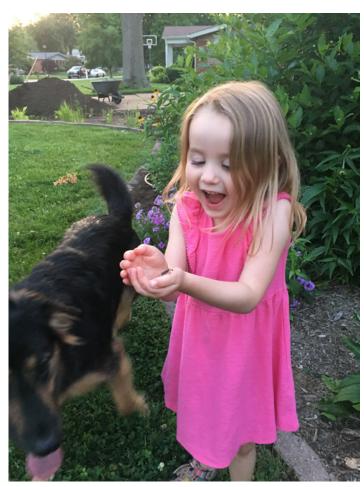


+608-223-3571









Left: The author's daughter finds a praying mantis and holds it close to her face for a better look. Right: Another daughter expresses her delight in finding her first lightening bug in their front yard.

# Sharing nature with kids

By Krystal Coxon

I'm in the backyard with my three kids who are collecting sticks to make a pretend fire. I walk over to check on the new spicebushes I planted the previous season. I notice that some of the leaves are curled and I'm worried that they didn't receive enough water.

As my focus and concentration increases, my kids take notice and come over and ask what I'm doing. I'm investigating. I gently open one leaf and am surprised to find a tiny brown and white caterpillar inside. My enthusiasm is contagious, and the kids get closer to look, their curiosity beginning to bubble over.

They search for curled leaves until we've found every last one of them. We take pictures, we ask how the caterpillars got there, we wonder what butterfly visited the shrub, and then we set about finding answers. A quick internet search tells us the spicebush swallowtail caterpillars make daily leaf tents with special webbing to protect themselves from predators. The kids begin to search for caterpillars in tents every day and wonder what other wildlife is visiting our 1/3-acre, suburban yard.

When my husband and I bought a home outside of St Louis nearly eight years ago, we knew we wanted a native plant-filled yard to share nature with our kids. We wanted to have an outdoor space that fostered curiosity and sparked creative play. The house we bought had a few boxwoods in the front yard and luckily some mature trees in the backyard, but was otherwise turf grass. We

immediately set about converting lawn to native wildflowers, shrubs and trees, as well as nonnative fruits, herbs and berries. We removed the boxwoods, smothered grass with cardboard and mulch, and planted a few feet out from the house at first, later adding more than 100 species of wildlife-attracting native plants primarily in our front and side yards. In addition, in 2019 we received a Wild Ones Front Yard Native Plant Makeover from the Wild Ones St Louis Chapter, adding 400 square feet of native plants made up of seven species that have great curb appeal and can withstand drought, heavy rainfall and road salt in the winter.

Children are naturally drawn to animals and a native plant landscape invites all sorts of wildlife. My kids love seeing the many types of



butterflies that visit blue mistflower (Conoclinium coelestinum) and blunt mountain mint (Pycnanthemum muticum), including skippers and zebra swallowtails. Black chokeberry (Aronia melanocarpa) blooms are irresistible to bees in the spring and my kids counted at least four different native bee species on one flower cluster.

Once monarch butterfly eggs hatch, my kids love to search for caterpillars on milkweed and track the length of the insects as they grow bigger with every leaf they devour. And when American toads visit us in the spring, the kids watch as eggs become tadpoles and tadpoles grow into toads. With more toads, come garter, rat and ribbon snakes, and that provides us a great opportunity to discuss the food web. My kids have discovered many other fascinating visitors to our "homegrown national park" including walking sticks, turtles, click beetles, hummingbird moths, deer, rabbits and dragonflies.

In addition to learning about the animals they share the world with, my kids benefit from our native plant landscape as a playground. Shrubs like buttonbush (*Cephalanthus occidentalis*), trees like red oak (*Quercus rubra*) and tall grasses like little

bluestem (Schizachyrium scoparium) make great hiding places for games of hide-and-seek. Rose mallow (Hibiscus lasiocarpos) blooms are a wonderful cake topper on a mud pie. A game of "the lawn is lava" means the kids must balance on decorative rocks, stepping stones and borders, and tiptoe around wildflowers to avoid stepping on grass to win the game. And when we remove spent plants in the spring, cupplants' (Silphium perfoliatum) square, long stems make great swords in a battle of woodland defenders. A child's imagination is endless, and a native landscape sets the stage.

Aside from animals, native plants teach us about their reproduction in seeds and dispersal. Rattlesnake master (Eryngium yuccifolium) seeds fall out of spiked seed heads easily. Blue false indigo (Baptisia australis) seed pods sound like a baby's rattle. Southern blue flag (Iris virginica) seeds are tightly nestled into an oblong shell. Milkweed (Asclepias spp.) seeds fly (when their fluff doesn't stick to your clothes). Birds eat native black raspberries (Rubus occidentalis) and disperse their seeds everywhere in their droppings. And you must overcome purple coneflower's

The Coxon kids in the family's native-plant filled front yard that serves as a learning playground.

(*Echinacea purpurea*) spikes to get to its seeds.

Supporting the children in your family, neighborhood and community is easy when you plant native species. I often find that fellow nature lovers have a potent, childhood memory that started their love of all things wild. My husband and I wanted to ensure we created opportunities for our kids to make their own nature-loving origin story and we offer that right outside our front door. I've listed a few helpful tips that I've picked up along the way for sharing nature with kids and I hope they help you. If nothing else, go outside and the kids will figure out the rest.

Attract wildlife to your yard. Start by planting native plants in a highly visible area such as outside your living room window. Native plants provide food and shelter to different birds, bees and butterflies. Decide which animals you'd most like to have as visitors to your yard and that will help you pick a native plant. For example, if you'd like to see monarchs, be sure to plant milkweeds. If you'd like to search for caterpillars in leaf tents, you'll want

Milkweed fluff clings to Coxon's son's ninja outfit as he tries to disperse seeds.





A child finds a spicebush swallowtail caterpillar in its leaf tent.

as, "Why does it look like that, what does it eat, do you think it's cute, and what's its name?" We love to name animals, especially insects that we might fear at first. Cupcake the wolf spider became a beloved, temporary pet and we carefully relocated Sally the shield bug outside after finding her in our kitchen.

Use your senses. At first, my kids' ears are overwhelmed with the symphony of bird songs, but once they sit quietly in one spot, they eventually find which bird is calling. At night, flashlights help their keen eyes find gray treefrogs camouflaged among the native, aquatic plants in our dragonfly pond. Elderberry (Sambucus spp.) blooms draw our noses near, and we wonder if an elderberry perfume already exists or if the kids should invent one. The stems of royal catchfly (Silene regia) are sticky to the touch to help protect itself from insects it traps but doesn't digest like carnivorous plants.

Support their evolving interests. A child's interest in nature will ebb and flow and evolve as they grow. Insect bingo is a fun game for little kids, but an older child may want something more challenging like plant propagation. When my kids were younger, we made art out of fallen leaves. Now my children are learning about different bee species that visit our yard through a citizen-science bee identification program that I participate in called Shutterbee.

Krystal Coxon, with the help of her husband, has been expanding native plantings in her St. Louis suburban yard to create both wildlife habitat and a playscape for their three children to encourage their exploration of nature. Previously, Krystal worked in environmental protection at the local, state and international levels for a decade. The Coxon family belongs to the Wild Ones St. Louis (Missouri) Chapter.

to plant spicebush (*Lindera benzo-in*). Lanceleaf coreopsis (*Coreopsis lanceolata*) and wild bergamot (*Monarda fistulosa*) make seeds that American goldfinches love to eat. Hummingbirds will visit coral honeysuckle (*Lonicera sempervirens*) and wild sage (*Salvias*) among many other flowering plants.

Learn how to learn more. As you and the children in your life begin to explore the native plants and wildlife that visit them, you may find that the kids ask, "What is that?" At least in the beginning, you may answer, "I don't know." A good follow-up statement is, "Let's find out." Take a photo, draw what you see, tem-

porarily collect small insects in an animal-friendly catcher to observe them, or record the animal's sound on your phone (we identified grey treefrogs this way well before we saw one). With this information, you can search in <u>iNaturalist</u> or other identification apps to determine the name of the animal. Once you have the name, you can search online to learn more.

Follow their curiosity. Children are naturally curious and often find wonder in places adults forget to look. Allow your child to lead the way when exploring the yard. When they have something to show you, go see it. Ask them questions such



## We've got you covered!

Native wildflowers, sedges, shrubs, ferns, grasses, pre-planned gardens, custom plant kits, and seed mixes. Visit and order online at **prairienursery.com**.





# **Book Review**

At a glance:

Titles: "Braiding Sweetgrass" and "Braiding Sweetgrass for

Young Adults"

**Author: Robin Wall Kimmerer** 

Published: September 2013 and November 2022, respectively

Cost: \$10 to \$40 depending on version: Kindle, paperback,

hard cover or audiobook

Stars: ★★★★★

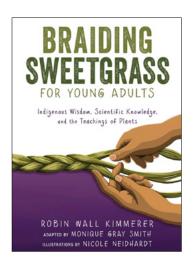


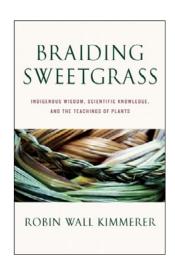
"Imagine being raised in a culture where gratitude is the first priority." — Page 92, "Braiding Sweetgrass for Young Adults"

If you're reading the Wild Ones Journal, I'm sure you've thought about how our culture and environment can benefit from a few changes. Both versions of Robin Wall Kimmerer's "Braiding Sweetgrass" and "Braiding Sweetgrass for Young Adults" expanded my worldview and detailed in a myriad of ways the gifts that the Earth bestows on us every single day. I cannot help but truly feel gratitude to plants and how they have shaped our world and I understand better how to show my appreciation.

For this review, I read "Braiding Sweetgrass for Young Adults" and listened to "Braiding Sweetgrass" (released in 2013) narrated by author Robin Wall Kimmerer. The audio version was 17 hours long / 384 pages and available through my library. The adaptation for Young Adults was released last year in paperback and is 291 pages long. An audio version of the Young Adults adaptation is not available as of this writing, but I hope one will be eventually!

Wall Kimmerer has such a calm and soothing voice — whether she was sharing the story of Skyworld, describing how to weave baskets or reliving the magic of the Three Sisters





— she paints a full picture thoroughly by describing sounds, tastes, sights, smells and textures.

"Braiding Sweetgrass for Young Adults" is separated into six sections, each with chapters that include Indigenous wisdom, scientific knowledge and what plants can teach us. The chapters are not very long and favor quality over quantity when it comes to information. I love how the Young Adult adaptation has a call to action at the end of every chapter. Some of the calls to action include ways to reflect on the chapter concepts (i.e., ceremony or what your gifts are), to encourage the reader to listen to the Thanksgiving Address with others, or to weave one of the Honorable Harvest principles into your week and reflect on what it made you think and feel. The Young Adults version also comes with incredible illustrations by Nicole Neidhardt. Some of my favorites were the Thanksgiving Address, Skywoman and Asters/Goldenrod. Key points for each chapter are beautifully illustrated inside a circle of braided sweetgrass.

"Braiding Sweetgrass" is more of a personal narrative. Wall Kimmerer conveys the experiences of her and her family, her journey to become a scientist and her insights as a mother. She also shares that she is not only a scientist but also a poet, which is evident in the beauty of her writing. While Wall Kimmerer does share some of the stories from the original, the adaptation is a condensed version that explains more explicitly what we can learn about social justice from plant communities. I feel like I can read or listen to both versions multiple times and experience them differently each time. I certainly feel more connected to the Earth now.

I did listen to the audiobook at 1.5x speed as the pace was a little slow for me. I plan to re-listen later in the summer while I'm working in my garden or walking in the forest preserve — anywhere I can be surrounded by asters and goldenrods.

I recommend both versions - I imagine the Young Adults version will be a staple in classrooms and outdoor education programs; it's perfect for summer reading! I think anyone who enjoys learning about history or science and feels strongly connected to nature will enjoy either version of "Braiding Sweetgrass." I have so much hope knowing that future generations have this book to inspire reflections, conversations and activism surrounding plants, our culture and solutions for charge.

Jen Medon has been a member of the Greater DuPage (Illinois) Wild Ones chapter since 2022, works full time in community corrections and enjoys gardening, bowling and spending time with her dog and three cats.

# **Book Review**

At a glance

Title: "Prairie Up: An Introduction to Natural Garden Design"

Author: Benjamin Vogt Published: January 2023 Cost: \$20-\$25 paperback

Stars: ★★★★★

## By Karen Ackroff

How do you start a prairie? Not a vast swath of land the size of the Great Plains, but a smaller property, even a suburban yard. Rip out the turf? Perhaps. Throw down a seed mix? Maybe.

Benjamin Vogt, who designs prairie landscapes, answers these questions and many more in his new book, "Prairie Up: An Introduction to Natural Garden Design." But this is not a formulaic, "just do this" set of instructions. He wisely counsels prospective prairie gardeners to do their homework first, suggesting how to evaluate the space, learn about and choose plants, and prepare for planting.

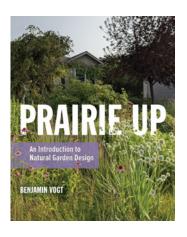
I wish I'd had this book when I decided to include prairie beds in my suburban landscaping. My prior gardening area was a long-established and very shady yard, and I knew nothing about prairie plants or starting a new yard. By the time I joined Wild Ones, I'd made multiple mistakes, and had some successes. I would have shifted the balance to greater success if I'd acquired more prairie knowledge before I started planting.

Ever since I heard a garden director describe hyper-tidied and constrained garden beds as "plants in bondage," I've tried to create more natural looking plots. In an urban or suburban setting this can lead to problems with the homeowners association and accusations of weediness. Vogt offers a tested, nuanced approach to address these issues.

Vogt's advocacy for a scientific point of view is a strong point throughout. He urges readers to take advantage of science: to use taxonomy and genus-species names for plants, to seek local-ecotype plants, and in general to become botanical experts, to take advantage of accumulated knowledge in planning our prairie spaces. The influence of climate change, the drawbacks of cultivars, and an appreciation of the services provided by native plantings are among the wide-ranging topics covered.

There are now many sources of advice on finding native plants and designing a space for them. In recent years Wild Ones has been promoting garden plans customized for areas across the country. This book takes it further, offering methods for customizing a plan to fit an area based on light levels and soil types. For those with larger areas, sound approaches to selecting and sowing seeds are detailed. Readers with established prairies could use this book to revamp sections or to plan public spaces.

A garden plan should favor



diversity, using plants that vary in traits like height, bloom color and timing, and wildlife support. Lest this seems too daunting, Vogt suggests a plan of attack: generate a list of eight plants that serve different, complementary roles in the garden. Then add eight more to broaden the set. To further empower readers, one chapter lists many resources, including websites and plant guidebooks. These recommendations are spot-on, and reflect what is taught to Master Gardener volunteers: trust the information from USDA, botanical garden and university sites.

The book is generously illustrated with color photographs and includes lists of plants suited for particular roles (early blooming, winter interest, reliable germination from sown seed), while urging repeatedly that gardeners should know their plants and know their sites. Sounds a lot like the gardener mantra: "right plant, right place"!

As an excellent concise resource for prairie gardeners, this volume rates 5 stars.

Karen Ackroff is a member of the Wild Ones Kettle Moraine (Wisconsin) Chapter. A retired scientist, she now studies homegrown prairies and volunteers at the Eagle Nature Trail.

# Jumping worms continue their spread

By Barbara A. Schmitz

While they may look a little funny as they twist and turn on the ground or in the air, there is nothing humorous about jumping worms. This invasive species consumes all organic material from the top layer of soil, leaving behind a coffee ground-like waste with no nutrients for plants or seeds.

Despite news reports suggesting these worms are new to the United States, jumping worms (*Amynthas* spp., *Metaphire* spp., *Pheretima* spp.), which also go by the name of Alabama jumpers, Jersey wrigglers and crazy snake worms, have been in the country since at least the late 1800s, according to the North Carolina State Extension. The worms are believed to have come here from regions in East Asia through Australia, moved by humans in soil and planting pots, and sold as fishing bait.

Today, jumping worms have been found in at least 34 U.S. states: Alabama, California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, Wisconsin and Wyoming.

Robert Bruner, <u>Purdue Extension's</u> exotic forest pest specialist, says: "Traditionally, when we see earthworms, they are deep in the ground and a little slimy. The jumping worms are a little bit bigger, kind of dry and scaly, and tend to thrash around much like a snake does." (Watch them in action <u>here</u>.)

In fact, USDA Forest Service soil scientist Mac Callaham says in an agency web post, "They can flip themselves a foot off the ground."

While worms have a reputation as a helpful species found in the soil ecosystem, invasive jumping worms

# It's important to look for and manage to keep numbers of this invasive worm down



do not live up to that standard, Bruner says. Since jumping worms stay within the first few inches of topsoil, they are not creating channels for water and air the way earthworms do. Rather, they disrupt water flow to plant roots.

"So basically, they're just very nasty pests that ruin the quality of our soil, and the only thing that can really grow in soil like that are essentially invasive plants, or species that are meant to survive really harsh conditions," Bruner says.

### **Jumping worm basics**

According to the <u>Wisconsin Department of Natural Resources</u>, jumping worms live on the soil surface in debris and leaf litter, or within an inch or two of the topsoil. So, look for them in your yards, gardens, mulch piles, compost, potted plants and woodlands.

Jumping worms thrash wildly from side to side when threatened. If their frenzied thrashing isn't enough to deter a predator, they can resort to breaking off segments of their tail to escape, according to the <a href="Invasive Species Centre">Invasive Species Centre</a>.

As they are voracious eaters, jumping worms quickly consume the top layer of organic material, making it difficult for plants to remain rooted and allowing nutrients to be washed away by rain.

While it's difficult to see jumping worms when they are young, you can detect their presence through changes in the soil. For instance, jumping worms will replace soil with their castings or waste, which resemble coffee grounds.

Today, approximately 17 species of jumping worms have been found in North America. But despite their wide dispersal across the United States, knowledge and research gaps concerning their biology and ecology persist.



## How to identify jumping worms

The worms have a smooth, glossy dark gray/brown color, and their clitellum, the lighter-color band, is cloudy-white to gray, completely encircles the body and is flush with the rest of the body.

But it's their snake-like and thrashing movements that give them away. And beware: Jumping worms tend to occur in large numbers. If there is one, there are bound to be more.

Jumping worms are usually easier to see in late summer or early fall when most of them are fully grown. It is also at this time that they reproduce, depositing egg-filled cocoons into their surroundings. Jumping worms are parthenogenic, meaning each worm can reproduce on its own without a mate. The mature worms will die at first frost, but the eggs spend the cold months protected in cocoons that are about the size of mustard seeds. Since they are hard to see and resemble small bits

of soil, they are often unknowingly moved in soil, mulch and potted plants.

According to the University of Nebraska Extension, jumping worms can also be detected using a <u>mustard pour</u>, which can be performed on a patch of soil using the following steps:

- 1. Mix 1/3 cup of ground yellow mustard seed with 1.19 gallons of water
- 2. Clear a patch of soil and slowly pour the mixture over it
- 3. Wait for worms to move to the surface to be identified

# How to keep jumping worms off your property

If jumping worms aren't in your yard yet, there are things you can do to keep them at bay. Most importantly, don't share ground soil or compost, and avoid potted plants from unknown sources.

You should also:

- Educate yourself to recognize jumping worms.
- Watch for jumping worms and signs of their presence.
- Arrive clean, leave clean. Clean soil and debris from vehicles, equipment, shoes and other personal gear before moving to and from a garden, work or recreational area they might contain jumping worms or their cocoons.
- Use, sell, plant, purchase or trade only landscape and gardening materials and plants that appear to be free of jumping worms.
- Sell, purchase or trade only compost and mulch that was heated to appropriate temperatures and duration following protocols that reduce pathogens. That means avoiding the often free compost or mulch provided to residents by cities, towns and villages.

There doesn't seem to be agreement over whether it is safe to hold plant sales. Many organizations throughout the nation have canceled plant sales, saying it isn't worth the risk. The Wisconsin DNR, however, says plant sales can still be safely conducted, although they stress that

extra care and attention must be taken so jumping worms are not accidentally moved in soil. The WDNR reports that proper treat-

ment of compost and mulch prior to purchase will kill jumping worms and other pests and diseases.

The <u>University of New Hampshire</u> warns that when dividing plants in early spring ahead of a spring plant sale or swap, jumping worms may not yet be present. However, that doesn't mean eggs aren't in the soil.

They offer these tips for gardeners and plant sale organizers to ensure they're not unknowingly spreading jumping worms:

- After dividing the plants, bare root the plants by rinsing the roots in water to remove any remaining soil. Removing the soil from the roots not only removes any cocoons, but also pests and weeds. When removing soil, be careful as this also may remove small root hairs that are the most active part of the roots.
- The cocoons are about the size of soil particles and rinsing will reduce the probability of transferring the cocoons with the plants. The rinse water may have cocoons, so be cognizant of what you do with the water you've used to rinse the roots. Allowing the water to evaporate, and then using boiling water to rinse the container, should kill the cocoons. Another method is to strain the water through cheesecloth and then bag the filtered matter.
- If repotting the bare-rooted plants, be wary of homemade compost as most does not reach 104 degrees F for three days, which is needed to kill the worm cocoons. Instead, use compost that has been heated to that required temperature.

Most importantly, if you decide to hold a plant sale, be sure to also provide information to gardeners on jumping worms.

# What if jumping worms are already on your property?

If you suspect jumping worms are

present on your property, Bruner suggests a process called <u>solarizing</u> to eliminate unwanted pests. He said gardeners should lay down a black or dark-toned

tarp on a sunny day and sprinkle a thin layer of soil on top, allowing it to reach a temperature over 104 degrees F.

Some other experts recommend a clear tarp, but Bruner said the color of the tarp doesn't matter as much as the time spent in the full sun. You need to have the soil on the tarp long enough for it to heat up to 105 degrees F.

Solarizing can be done with either soil or compost, Bruner adds. "Soil or compost being solarized needs to be completely wrapped in plastic; if left uncovered, the worms would just escape to another area," he says. "Essentially [you're] making the world's worst sandwich and allowing it to heat up and kill whatever is in there.

"It's important to do this for soil that you don't know or trust the source," Bruner stresses. "Avoid using soil or compost from unknown sources in general."

The Wisconsin DNR also encourages people not to panic, noting that just because you have jumping worms in one part of your property doesn't mean that they are everywhere.

To avoid the spread of jumping worms on your property, the WDNR suggests you:

- Remove and destroy jumping worms when you see them. Simply seal them in a bag and throw it in the trash they will not survive long. Reducing the adult population will eventually reduce the number of egg-carrying cocoons in the landscape.
- Use heat treatment. Jumping worms and their cocoons are sensitive to high temperatures. Research has shown that neither worms nor cocoons can survive 105°F or above for more than three days. Under the appropriate conditions and manage-

ment, compost piles can easily reach this temperature. In addition, using clear plastic to cover the topsoil of gardens and lawns exposed to full sun can raise the temperature enough to kill cocoons, even in the spring.

- Use chemical treatment. Research has shown that BotaniGard, a biological insecticide containing Beauveria bassiana, an entomopathogenic fungus that attacks crop pests like aphids, thrips, whitefly, spider mites, mealybugs and root aphids, can significantly reduce the abundance of jumping worms. While Beauveria bassiana is safe for beneficial insects, experts recommend avoiding spraying where bees forage, according to the Louisiana State University Ag Center.
- Experiment. If necessary, try a variety of plants or consider alternative

landscaping in heavily infested parts of your property as jumping worms seem to prefer some plants or landscaping.

Try a variety of mulch products such as straw or native grass clippings (e.g., big bluestem, Indian grass, etc.)

• Keep your chin up. Research is moving forward to find ways to control and manage jumping worms. As you experiment with controls and adapt your gardening practices, share your successes (and failures) with fellow gardeners, land managers and researchers so that all learn from each other.

In addition, the <u>University of</u>
<u>Minnesota Extension</u> recommends
other ways to control jumping worm
populations, from spreading coco-

nut mulch or coir in vegetable gardens or new plantings, to pouring mustard powder on the soil. In addition, citizens also reported that some native plants do better when

jumping worms are around,

including bee balm (*Monar*-

da), black-eyed Susan (*Rudbeckia hirta*), bottle brush grass (*Elymus hystrix*), Canada goldenrod (*Solidago canadensis*), smooth blue aster (*Symphyotrichum laeve*), Virginia creeper (*Parthenocissus quinquefolia*), white avens (*Geum canadense*) and yarrow (*Achillea millefolium*).

If you spot any invasive species including jumping worms, contact your state's Department of Natural Resources or Extension office to report your findings.

# Rebranding of Wild Ones to be unveiled soon

By Katie Huebner

Wild Ones shared in last summer's issue of the *Wild Ones Journal* that we had undertaken the important work of evaluating our brand and messaging. It had been a number of years since an evaluation of our brand had been conducted and we knew we needed to re-clarify who we are and what makes Wild Ones the best organization through which to engage in the native plant movement.

This work was especially timely because we wanted to be properly rooted in who we are, have a more current look and be appealing to the broad audience we want to attract as members before undertaking the important and long overdue tasks of updating our website and providing better templates and resources to chapters.

To accomplish this goal, we decided to partner with a marketing agency with environmental nonprofit experience to produce a new logo, tagline, color schemes, visual identity and brand standards, and re-evaluate our mission, vision, values and

core messaging. After reviewing marketing firms from around the country, we selected an agency in British Columbia that understood who we are and where we needed to go and began work in the fall of 2022.

As an early step in the process, we asked Wild Ones members in October 2022 to provide feedback through a survey on our current branding about what was working and what needed improvement. We also identified and conducted verbal interviews with additional primary stakeholders to help elaborate and provide clarification on what was discovered through the survey and to share additional insights that may have been missed.

After synthesizing all of the valuable input, members of the board and staff, together with the marketing agency, began the important work of developing a new logo and messaging. This process has been one of evolution over the past six months and has served as a reminder that Wild Ones has a rich history with many layers of who we are and what

we do. Our team was up to the challenge of capturing and communicating the full scope of who we are as an organization and where we want to go accurately and succinctly in both written and visual formats.

We are excited to share that at the end of February, the board of directors reviewed and approved — with high praise — our new logo and messaging and we are in the final stages of completing these assets. We are also concurrently working on developing a phased branding implementation plan for national and chapters to update digital spaces, printed materials, merchandise, etc., with our new visual identity and messaging.

Our goal is to unveil and go live with our new brand in late summer/early fall. Stay tuned for more information. We also want to share that we are deeply grateful for the patience of our chapter leaders as they have embarked on yet another tabling season with new assets still in limbo. We feel confident that the care taken to update our brand will make the wait worthwhile.



By Mackenzie Seymour

Have you ever wondered why the milkweed in your yard remains uneaten despite reports of an uptick in last year's monarch butterfly populations? Well, your milkweed may remain untouched for yet another year if monarch populations continue to decline due, in part, to climate change, city ordinances and drastic changes in the species' overwintering habitat.

The Xerces Society for Inverte-brate Conservation reported 335,479 butterflies during the 2022 Thanksgiving Western Monarch Count, but the New Year's count reported 116,758—a 58% drop. Typical population decreases between the holidays are around 35% to 49% according to the Xerces Society as monarch butterflies are vulnerable in cold climates; the significant population drop is due to severe storms that took place this past winter.

A monarch munches on butterfly weed. The monarch population is expected to decline again this year, in part due to climate change, city ordinances and changes in their overwintering habitat.

Severe storms on the West Coast are a part of a continuing trend of worsening winter weather year after year across the country. The Environmental Defense Fund (EDF), an environmental nonprofit organization dedicated to advocating and researching climate solutions and preserving the natural systems on which all life depends, explains that the planet's rising temperatures increase evaporation of water into the atmosphere, and therefore, "added moisture means more precipitation in the form of heavy snowfall or downpours."

Meanwhile, Texas, Oklahoma and much of the central U.S. are currently experiencing extreme drought conditions, making it difficult to grow milkweed and other nectar plants. Texas serves as an important site for Eastern monarch butterflies to funnel in and out of Mexico during fall and spring migrations, and the species uses available milkweed in the area to lay eggs on during their journey north.

On top of worsening climate conditions, some Midwestern cities still list common milkweed (Asclepias syriaca) under their weed restriction lists because of the perception that the species is invasive and toxic. These ordinances prevent homeowners from growing common milkweed and subject those who do with fines reaching into the hundreds of dollars.

The misconception that common milkweed is invasive and harmful has been around for quite some time because of its "reputation [with farmers] for encroaching on cropland where it can compete with crops for soil and light," according to an <u>EDF blog post</u>.

Although the plant does contain

glucosidic substances called cardenolides that are toxic to humans, pets and livestock, it is only harmful in large quantities and "animals usually do not eat milkweed unless good forage is scarce," according to the U.S. Department of Agriculture.

Despite the misconception being debunked by well-respected scientific institutions, such as the USDA and U.S. Fish and Wildlife Service (USFWS), cities such as St. Louis, Lamar and Sunset Hills in Missouri, and Huron and Redfield in South Dakota declare common milkweed as a "public nuisance."

Under St. Louis' municipal code, common milkweed and other native plants, such as ironweed (*Vernonia* spp.,) are considered "unsightly and which may impede the clearing of any lot or lands within the City ... are hereby declared a public nuisance." Winfield, Kansas lists milkweed as "rank vegetation."

With city ordinances limiting milkweed growth and heavy snowstorms impacting butterfly populations, a monarch butterfly's chance of reaching its overwintering habitat in Mexico decreases — as evidenced by this past winter. Data released in March 2023 by the World Wildlife Fund (WWF) showed a 22% decrease in hectare usage (from 7 acres in the previous winter to 5.5 acres) in the Monarch Butterfly Biosphere Reserve (MBBR) and surrounding areas on the border of Michoacán and the State of Mexico.

"This is part of a mostly downward trend over the past 25 years — when monarchs once covered more than 45 acres of forest," WWF stated in a press release.

Additionally, WWF researchers analyzed <u>forest degradation</u> in the core of the MBBR. Between March of 2021 and April of 2022, 58.69 hectares of forest were affected by sanitation cutting, fires, drought and illegal logging. This number has tripled compared to the previous year.

Before the 1990s, milkweed on agricultural land used to provide one



of the largest available resources for monarch reproduction, but widespread use of glyphosate herbicides starting in the late 1990s caused rapid decline of those habitats. Prolific use of these herbicides is still one of the biggest factors contributing to the monarch butterfly population decline.

The Environmental Protection Agency (EPA) identifies ecological risks of using glyphosate for terrestrial and aquatic plants, mammals, birds and honeybees. The EPA states they are committed to protecting pollinators, including monarch butterflies, from the risk of glyphosate.

"EPA believes that a holistic approach is needed for monarch conservation that includes judicious use of herbicides, balancing weed management needs with monarch conservation needs, and focusing on ways to support monarch conservation through pesticide registration review, registration and stakeholder outreach and education," according to their website.

The EPA states that glyphosate does not cause harm to human health and is not linked to cancer despite research identifying potential links to non-Hodgkin lymphoma, increased risk of liver inflammation and metabolic disorders and increased oxidative stress biomarkers in urine.

A monarch butterfly nectars on swamp milkweed (Asclepias incarnata).

On March 20, 2020, the EPA's stance on the use of glyphosate was challenged by the Natural Resources Defense Council and Pesticide Action Network North America on the basis of reapproving the herbicide.

On June 17, 2022, the U.S. Court of Appeals for the Ninth Circuit <u>rejected</u> the EPA's stance that glyphosate does not cause cancer, ruled that the EPA violated the Endangered Species Act (ESA) on the basis that they did not analyze the effects of their actions on threatened and endangered species as required by the ESA and ruled that the EPA must perform a reassessment of glyphosate's ecological impact.

Despite these rulings, the EPA still <u>lists glyphosate</u> as "not likely to be carcinogenic to humans," but it intends to revisit the evaluation of the carcinogenic potential of glyphosate and intends to follow ESA requirements before issuing a final review decision.

In a 2020 species status <u>assessment</u>, USFWS estimated the probability of the monarch's point of inevitable extinction (pE) for both Western and Eastern populations. The Western population pE is high with a 60% to 68% chance of extinction within 10 years, and the current Eastern population pE is 48% to 69% with projected future conditions ranging from 56% to 74%.

In that same assessment, the USFWS determined that listing the monarch butterfly under the Endangered Species Act "is warranted but precluded at this time by higher priority listing actions." The monarch butterfly's reassessment for endangered status is up for review in 2024.

Mackenzie Seymour is attending Illinois State University for a master's degree in biological sciences with an emphasis in neuroscience and physiology. She is researching how fluctuating climate change temperatures impact animal nervous systems.

# Please support our business members who support our organization

#### ARKANSAS Holland Wildflower Farm

info@hollandwildflowerfarm.com https://hollandwildflowerfarm.com

#### White River Nursery

<u>alex@whiterivernursery.com</u> <u>https://www.whiterivernursery.com</u>

#### COLORADO All Beings Ecoscapes LLC

<u>caleb@allbeingsecoscapes.com</u> https://allbeingsecoscapes.com

#### **Earth Love Gardens**

<u>aaron@earthlovegardens.com</u> <u>https://www.earthlovegardens.com</u>

#### Honeywood Garden Design, LLC

info@honeywoodgardendesign.

https://honeywoodgardendesign.com

# Colorado Native Landscapes & Design

<u>coloradonativelandscapes@gmail.</u> <u>com</u>

https://www.coloradonativelandscapes.com

# Numine Nutrition & Wholeness

mtll2co1@yahoo.com https://numinenutritionandwholenessllc.org/

# Water It With Love Landscaping, LLC

wateritwithlove@gmail.com https://www.wateritwithlove.com

#### Wild Rose Landscaping

ellie@wildroselandscaping.com https://wildroselandscaping.com

#### CONNECTICUT

Wildscape Artisans

ted.braziler@gmail.com http://www.wildscapeartisans.com

# District Of Columbia Izel Native Plants

hello@izelplants.com https://www.izelplants.com

#### **ILLINOIS**

**Dig Right In Landscaping** 

jeff@digrightin.com https://www.digrightin.com

# Midwest Groundcovers, LLC & Natural Garden Natives

mbalistreri@midwestgroundcovers. com

https://www.midwestgroundcovers.com/

#### **Natural Communities LLC**

<u>natives@naturalcommunities.net</u> <u>https://naturalcommunities.net</u>

#### **Possibility Place Nursery**

terry@possibilityplace.com https://www.possibilityplace.com

#### **Purple Violet Shop**

anita@purplevioletshop.com https://purplevioletshop.com

#### Spirited Gardener, Inc.

spiritedgardener@gmail.com https://spiritedgardener.com

#### **The Growing Place**

grow@thegrowingplace.com https://www.thegrowingplace.com

#### Twig Landscape Design

mk@twiglandscapes.com https://twiglandscapes.com

#### **INDIANA**

**Indigo Gardens & Design** 

indigognd@gmail.com https://www.indigogardensanddesign.com

#### **New Image Gardening LLC**

Kkelling@gmail.com https://www.facebook.com/ people/New-Image-Gardening-LLC/100057542804051/

#### **IOWA**

**River Valley Ag** 

<u>Krutledge@rivervalleyagc.com</u> <u>https://rivervalleyagc.com</u>

#### KENTUCKY

**Fields to Forest** 

annwhitney\_garner@yahoo.com

#### **MAINE**

**Mainely Gallery & Studio** 

MainelyGallery@gmail.com https://www.mainelygallery.com

#### MARYLAND

**Native By Design** 

laurenhubbard100@gmail.com https://www.facebook.com/nativeby-design-llc-2113417288925283

#### **Wildflower Native Plant Nursery**

mariana@wildflowernativeplants.

https://www.wildflowernative-plants.com

# MASSACHUSETTS Tish Landscape Design

tish@tishlandscape.com https://tishlandscape.com

#### MICHIGAN Bee Friendly Nursery

Naturebynoelle@yahoo.com https://bee-friendly-nursery.business.site/

#### PLEASE SUPPORT OUR BUSINESS MEMBERS WHO SUPPORT OUR ORGANIZATION

#### **Bendy Stem Farm**

bendystemfarm@gmail.com https://www.bendystemfarm.com/

# Designs By Nature - Upper Peninsula Native Plants, LLC

designsbynatureup@up.net https://www.upnativeplants.com

#### **East Michigan Native Plants, LLC**

angela@eastmichnatives.com https://eastmichnatives.com

#### **Four Season Nursery**

FSN7557@AOL.COM https://www.fourseasonnurserytc. com

#### Michigan Wildflower Farm

michiganwildflowerfarm@gmail. com https://michiganwildflowerfarm. com

#### **Native Connections**

jared@nativeconnections.net https://nativeconnections.net

# WILDTYPE Native Plant Nursery, Ltd

wildtypeplants@gmail.com https://www.wildtypeplants.com

# MINNESOTA Ed's Buckthorn Control

ed@edsbuckthorn.com
https://edsbuckthorn.com

# Enabling Healthy Habitats, LLC enablinghealthyhabitats@gmail.com

#### **Morning Sky Greenery**

info@morningskygreenery.com https://www.morningskygreenery.com/

#### **Prairie Moon Nursery**

<u>carmen@prairiemoon.com</u> <u>https://www.prairiemoon.com</u>

#### **Shooting Star Native Seeds**

info@shootingstarnativeseed.com https://www.shootingstarnativeseed.com

#### **Shoreview Natives**

Shoreviewnatives@gmail.com https://www.shoreviewnatives.com

# Trillium Garden Design and Maintenance

campsite6@gmail.com

#### **MISSOURI**

#### Missouri Wildflowers Nursery LLC

mowldflrs@socket.net https://mowildflowers-net.3dcartstores.com

#### St. Louis Native Plants LLC

svdr1@sbcglobal.net
https://stlouisnativeplants.com

# **NEW JERSEY Bountiful Gardens**

<u>lisa@bountifulgardens.com</u> <u>https://bountifulgardens.com</u>

#### **Landscape Design**

carolle@asterplans.com https://www.asterplans.com

#### **NEW YORK**

#### Amanda's Native Garden LLC

ellen@amandasnativeplants.com https://www.amandasnativeplants. com

#### **Dirty Gaia**

<u>sue@dirtygaia.org</u>
<u>https://dirtygaia.org</u>

#### **Native Roots Ecosystems**

info@nativerootseco.com https://nativerootseco.com

#### OHIC

#### Freshwater Farms of Ohio, Inc.

drdave@fwfarms.com https://www.fwfarms.com

#### **Montessori Earth School**

jenn@montessoriearthschool.org https://montessori.earth

#### **Native Roots, Inc.**

Jen@nativerootsinc.com https://www.nativerootsinc.com

#### **Ohio Native Concepts LLC**

ohionativeconcepts@gmail.com https://ohionativeconceptsllc.com

#### **Ohio Native Habitat Nursery**

jmckenney@ohio-nhn.com https://www.ohio-nhn.com

#### Plant It Native LLC

josh@plantitnativeohio.com https://www.plantitnativeohio.com

#### **Scioto Gardens Nursery**

folks@sciotogardens.com https://sciotogardens.com

#### **Wild Hare Prairie Native Nursery**

christyelena@att.net https://wildhareprairienativenursery.com

#### PENNSYLVANIA

#### Allegheny Financial Group

Browntl5@gmail.com https://www.alleghenyfinancial. com

#### **Arcadia Natives**

arcadianatives@gmail.com
https://arcadianatives.com/

#### **B.G. Services**

<u>Gambonew@aol.com</u> <u>https://bgtreecare.com</u>

#### **Ernst Conservation Seeds**

ayshea@ernstseed.com https://www.ernstseed.com

## McMullen House Bed & Breakfast

robcoxe@mcmullenhouse.com https://mcmullenhouse.com and https://shop.mcmullenhouse.com

#### **Redbud Native Plant Nursery**

<u>info@redbudnative.com</u> <u>https://redbudnative.com</u>

#### **Spruce Hollow LLC**

sprucehollow19119@gmail.com https://sprucehollownaturaldesigns.com

#### The Weed Lady PGH

Rachel@theweedladypgh.com

#### PLEASE SUPPORT OUR BUSINESS MEMBERS WHO SUPPORT OUR ORGANIZATION

#### **This Green City**

thisgreencitypgh@gmail.com https://thisgreencitypgh.com

#### **TENNESSEE**

**Bleeding Heart Landscaping** 

bleedinghearthome@gmail.com https://bleedinghearthome.com

#### **GROWILD INC**

growild@gmail.com https://www.growildinc.com

#### **The Rewilding Collective**

<u>dylan@rewildingcollective.co</u> <u>https://www.rewildingcollective.co</u>

#### Thomas Nursery Inc.

thomasnsy@icloud.com http://www.thomasnurserytrees. com

#### **TEXAS**

## Natural Texas Lawn & Property

Naturaltexaslawn@gmail.com https://www.naturaltexaslawncare.com

#### **VIRGINIA**

Sherwood Landscape Design, LLC gary@sherwood-landscapedesign.

com

#### WASHINGTON Tapteal Native Plants, LLC

<u>info@taptealnativeplants.com</u> <u>https://www.taptealnativeplants.</u> com

#### **WISCONSIN**

Alive & Well Naturally

breasthealth4U@gmail.com https://aliveandwellnaturally.com/

# Cason Land & Water Management, LLC

info@casonland-water.com https://www.casonland-water.com

#### **DEL - Diverse Environmental Landscapes**

paul@landscapewithDEL.com https://landscapewithdel.com

#### **Formecology LLC**

john.g@formecology.com https://formecology.com

#### **Good Oak Ecological Services**

frank.hassler@gmail.com http://goodoak.com

#### **Hickory Road Gardens**

brayherb@mtc.net

#### Johnson's Nursery Inc

rdummert@jniplants.com https://www.jniplants.com

#### Milwaukee Montessori School

mvanaken@milwaukee-montessori.org

https://www.milwaukee-montessori.org

#### **NES Ecological Services**

jhavel@releeinc.com https://neswi.com

#### **Northern Native Plantscapes**

florabee@hotmail.com

#### **Prairie Nursery**

ndiboll@prairienursery.com https://www.prairienursery.com

#### Rochester Deli, Inc.

greatfood@rochesterdeli.com https://www.rochesterdeli.com

#### Villani Landshapers

<u>lisa@villani-landshapers.com</u> <u>https://www.villani-landshapers.com/</u>









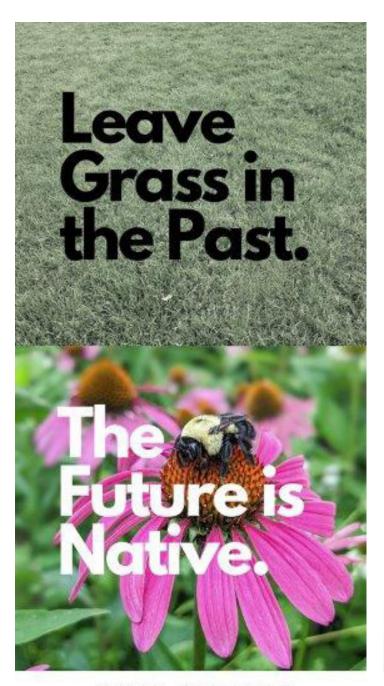
www.MNLcorp.com (763) 295-0010

- Native Plants & Plant Kits
- Native Seed Mixes
- Online Store
- Construction Services
- Vegetation Management Services









# OHIO NATIVE CONCEPTS LLC

Ecological Landscape Design and Installation

Native Garden Consulting and Coaching

Invasive Species Management Consulting



(614)561-1673

Ohionativeconcepts@gmail.com Ohionativeconceptsllc.com





We create award-winning regenerative waterwise landscapes to support all life Fire-resistant landscape consultant

woodslandscapedesign.com 720.937.4782 Chris Woods • Landscape Designer

Serving Boulder County, Colorado and surrounding communities













# order Native Plants Online

Pick up on Chicago's Northside April-November

RedStemLandscapes.com 773-454-4800



# Documenting and taking action against stiltgrass in Michigan



By Andrea Matthies Imagine discovering that your beautiful woodland of oak, cherry, hickory and maple has suddenly been invaded by a huge swath of alien grass. For many of you, this has already happened; for others, learn and be vigilant.

In 2016, Jim Odell and I found an area the size of a dining room table infiltrated with a strange grass. We called the area Four Ears because does would regularly settle their twin fawns in the soft grass. We sprayed. In 2017, the remaining seedbank had drained down the hill sprawling over a quarter acre. Our property became the local Stiltgrass Learning Center: learn and pull.

In 2018, we found stiltgrass in two other neighborhoods in Scio Township. Since this included public lands, the Stiltgrass Working Group was formed within days by our local land stewards.

Stiltgrass is ranked No. 2 in its top 10 invasives by the <u>Midwest Invasive Plant Network</u>. The U.S. Forest Service ranks it a Category 1. Internationally, stiltgrass is a "plant of concern"— spreading from its origins in Asia to the U.K.

Why has (Japanese) stiltgrass (*Microstegium vimineum*) continued creeping and leaping from Knoxville, Tennessee, since 1919 to its sprawling presence in 2023? <u>EDDMapS.org</u> documents stiltgrass in most counties east of the Mississippi and its move into New England, Ontario and west of the Mississippi. For over a century, we have not been able to bring stiltgrass under control. Why?

Introduced as packing material for porcelain and Asian goods, its disposal quickly proved difficult. Local ruminants found it unpalatable — even when mixed with hay. Goats aren't keen on it either.



Stiltgrass sprawls down a hillside.

#### What is this plant?

Stiltgrass is a delicate, low-growing annual grass with stems that sprawl over one another and root at the nodes, hence, stilt-grass. In Michigan, it emerges in mid-June. The roots are thready and weak. Plants are easy to pull.

The alternate leaves are short: 5-10 cm (~2-4 in) long and up to 1.5 cm (0.6 in) wide. They are pale green and lance-shaped with a distinctive, reflective mid-rib — slightly off center. In late season sun, the green stems turn purple and brown.

Inflorescence and seed set can occur from late August into September depending on locale and weather. Each plant produces 100-1,000 seeds, which remain viable for 3 to 5 years. While seeds emerge conspicuously from the flowering tops, they also nestle in the stems. Stiltgrass is both chasmogomos and cleistomgamos.

Stiltgrass is very adaptable and tolerates varying levels of soil acidity and moisture. It prefers forested floodplains where it outcompetes native plants in deep shade. However, in full sun it uses prairie grasses and shrubs as crutches to climb many feet. Since it can set seed at only 3 inches, it can replace turf grass and spread to your neighbor's yard through shared mowing services.

Stiltgrass spreads rapidly by water flow, wildlife, foot and vehicular traffic. Watch out for truckloads of soil, woodchips and gravel.

Deer are a key means of spread. When deer cushion their winter ruminating on beds of stiltgrass thatch, the seeds penetrate their dense winter coats. As deer begin their spring browsing, tufts of fur drop here and

there. Their hooves push embedded seeds into deer trails. Stiltgrass later appears as deer-shaped sleeping pods with little tufts popping up along deer paths.

Identification and control are made more difficult by various factors. Generally, people are more familiar with forbs than grasses. Initial clusters are often tucked in with native white cut grass (*Leersia virginica*). Check out the Field Guide to the Identification of Japanese Stiltgrass with comparisons to other look-a-like species for help with its identification.

How do we learn about invasive plants new to us? We go to trusted agencies like our state Department of Natural Resources. However, what if the language used in that source adopts legacy language or confusing photographs? After all, this plant is new to many people, and they have not handled it. As a result, the descriptor, "bamboo-like," is still around — probably because of the plant's Asian origins. So, let's review. Stiltgrass is a short, floppy grass with thready roots that emerge from its leaf nodes.

In southern Michigan, stiltgrass seeds first germinate in mid-June. The 3-month growing season is out



A stiltgrass seedling.

of sync with most natural areas' management programs. These seed-lings are emerging in the woodland understory, tucked into sedge or fern clumps or — best of all — under stinging nettle.

#### So, what can you do?

Before stiltgrass emerges, find out where in your area you should report such discoveries. What information do they need? Whether the stiltgrass is on private or public lands will affect the response. Spread the word through newsletters, social media and other means.

When out walking, hiking, biking or camping, take your phone and stuff a disposable bag in your pocket. Yes, I know you will be primarily focused on the birds, the trees and the flowers. But spend *some* time scanning the adjacent ground: both the trail and the surrounding area. If you spot a suspected clump (or worse) of stiltgrass, note the GPS location and remember landmarks. Photograph the clump, close up and in context. Then, pull it. Stiltgrass will pull out easily.

If it doesn't pull out easily, you have mistaken it for a native, perennial grass. Stuff the stiltgrass in your bag. If this sighting is new to your area, report it to EDDmapS.

org. Then, contact your Cooperative Invasive
Species Management Area (CISMA) or other agency. Both before and after your excursion, make sure your boots, bike treads or camping equipment are clean.

In other parts of the country, you are familiar with invasive grasses. This is an introductory warning to those living or visiting places not yet on the EDDmapS for stiltgrass. We lack space here to deal with its treatment. More details on pre-emergent herbicides, pulling, spraying, torching and cutting

are posted on the Ann Arbor (Michigan) Wild Ones Chapter website.

In 2022, the efforts to fund the Stiltgrass Working Group were rejected by the Michigan DNR. Most of the stiltgrass is now on private property, and local land stewards are funded by city and county taxes and restricted from working on private lands.

With an abundant deer population, the control of stiltgrass is becoming increasingly difficult. So, those of you who care for the biodiversity of our lands should watch for this, make certain that responsible entities are informed, and try to contain this horrible plant. Persevere! From her feral childhood running through the birch/poplar woods behind her family's house up to the bluffs overlooking Lake Superior, Andrea Matthies became a medieval architectural historian climbing up the spiral staircases of very tall old buildings. The past 25 years brought her back to the woods and a wonderful community of people who care for their natural variety, including volunteering as president of the Wild Ones Ann Arbor (Michigan) Chapter.

#### **Mark Your Calendar**

JUNE

**National Great Outdoors Month** 

June 3

**National Prairie Day** 

lune 6

**National Gardening Exercise Day** 

June 13

**National Weed your Garden Day** 

June 15

**Nature Photography Day** 

Get outside and take photos of your native plants and gardens so you'll have lots to enter in Wild Ones' upcoming photo contest!

lune 19-25

**National Pollinator Week** 

**JULY** 

July 1 - Aug. 31

Member entries are accepted for the Wild Ones Digital Photo Contest! Entries must be submitted online at wildones.org/photocontest.

July 11

**National Cheer Up the Lonely Day** 

How about taking someone a bouquet of native flowers from your garden?

July 22-30

National Moth Week

July 22

**National Hammock Day** 

Since native plants require less maintenance than nonnatives, spend the day resting in your hammock.

**AUGUST** 

**National Water Quality Month** 

It's a great time to share the news that native plants' deep roots help provide cleaner water. Does your community include native plants in parks and road-side plantings? If not, let them know the benefits of doing so!

Aug. 17

**National Nonprofit Day** 

Please remember Wild Ones as you celebrate National Nonprofit Day. It's a great time to make a special donation to help the organization grow.

#### **CHAPTER ANNIVERSARIES**

Includes anniversaries between February-April

<u>Chapter</u> Years
Milwaukee-Southwest-Wehr, Wisconsin 31
Greater DuPage, Illinois
Twin Cities, Minnesota
Root River Area, Wisconsin
Red Cedar, Michigan
Wolf River, Wisconsin
Mid-Mitten, Michigan 17
Oak Openings Region, Ohio 16
Kettle Moraine, Wisconsin
SE MN Prairie Partners, Minnesota 12
Dayton Area, Ohio
Loess Hills, Iowa 6
Grand Traverse, Michigan 6
Northwoods Gateway, Wisconsin 4
Ozark, Arkansas 3
SoKY, Kentucky
Quad Cities, Illinois
South Central Pennsylvania, Pennsylvania 1
Georgia Piedmont, Georgia 1
Appalachian Highlands, Tennessee 1

#### **NEW CHARTERED CHAPTERS**

Jo Daviess County, Illinois

Founded March 30, 2021, chartered Feb. 7, 2023

Pontchartrain Basin, Louisiana

Founded Aug. 24, 2022, chartered March 13, 2023

Midcoast Maine, Maine

Founded Feb. 9, 2023, chartered April 22, 2023

#### **NEW SEEDLING CHAPTERS**

Mid-Hudson Valley, New York

Founded Jan. 12, 2023

Chesapeake Bay Western Shore, Maryland

Founded Ian. 19, 2023

Rhode Island, Rhode Island

Founded Feb. 24, 2023

San Diego, California

Founded March 3, 2023

Essex County MA Lowlands, Massachusetts

Relaunched March 6, 2023

Miami Valley, Ohio

Founded March 10, 2023

Gulf Coast Alabama, Alabama

Founded March 30, 2023

IN MEMORIAM

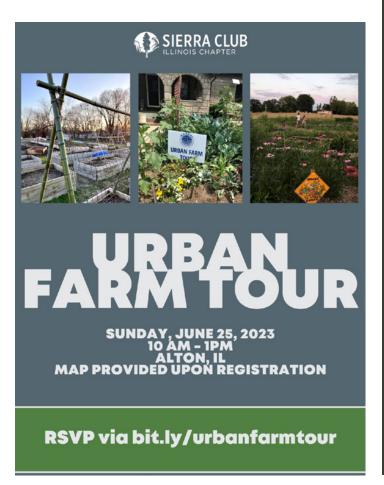
Larry Jacobi, Milwaukee-Southwest-Wehr

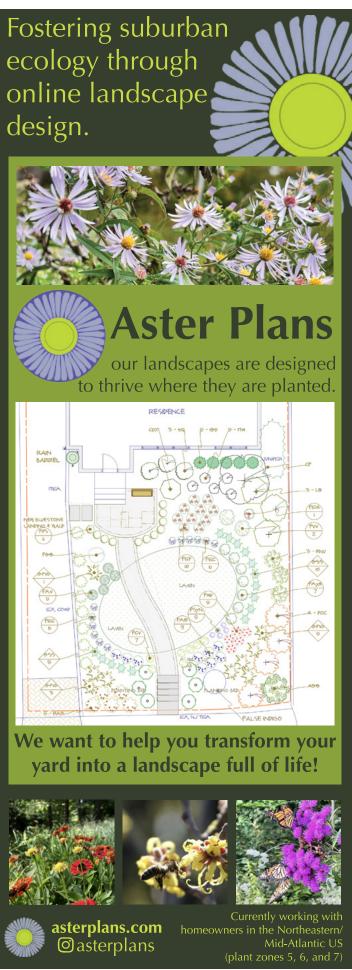
Carol J. Scott, Greater Cincinnati

Donald Geiger, Greater Cincinnati

# MEMORIZE NATIVE PLANT NAMES







#### **NEW AFFILIATE MEMBERS**

#### **Auburn University**

http://www.auburn.edu/cosam/ arboretum Morgan Pendergrass Central Alabama (Seedling)

#### **Barbara Scotford**

**Twin Cities** 

#### **Branford Conservation and Environment Commission**

Heather Wells-Sweeney Mountain Laurel

#### **CAKE CISMA**

https://cakecisma.org Lindsey Bona-Eggeman Northwest Lower Michigan (Seedling)

#### **Christine Conley**

Western Pennsylvania Area

#### **First Circle**

https://www.firstcircle.systems Cimbria Badenhausen Mohawk Valley

# Flannel Roots Micro Permaculture Farm

https://flannelrootsfarm.com Brittany Burch Western Pennsylvania Area

#### **GardenVitals LLC**

https://www.gardenvitals.com Sharon Burnham Partner At Large

#### **Good Neighbor Iowa**

https://www.goodneighboriowa. org Emily Dvorak Quad Cities

#### **Grow Good Hawaii**

Paul Arinaga Partner At Large

#### **Hope and Help**

Hope Hoffman Partner At Large

# Jamesville Community Cross Garden

https://jamesvillencfoodpantry.com Brenda Perry Carolina Triangle

#### Jerry Culp

Illinois Prairie

#### **Kathleen Seal**

**Twin Cities** 

#### **Native Plant Society of Texas**

https://npsot.org
Meg Inglis
DFW (Seedling)

#### Roots n Shoots Nature-Based After School Care

Lynn Rutter Midcoast Maine

#### **Seton Hill University**

https://www.setonhill.edu Renee Rosier Western Pennsylvania Area

#### **Shalana Gray**

Front Range

#### **Stonington Garden Club**

https://stoningtongardenclub.org Kirby Williams Mountain Laurel

#### **The Barefoot Gardener**

https://boulderbarefootgardener. com Kimberly Lehman Front Range

#### **Warren County Stormwater**

https://warrencountyky.gov Andrea Strange SoKY

#### **Wendy Brissette**

South Bend

#### RENEWING AFFILIATE MEMBERS

### **Catherine Fox**

SoKY

#### **Elizabeth J McIntosh**

Twin Cities

#### **Gerardo Gomez**

Appalachian Highlands

#### **Glenn Olson**

Prairie Edge

#### **Good Natured Landscapes LLC**

https://goodnaturedlandscapes.com
Denise & Frank Sandoval
Greater DuPage

#### **Jenny Pilling**

Madison

#### **Litzsinger Road Ecology Center**

https://litzsinger.org Bob Coulter St. Louis

#### **Middletown Pollinator Pathway**

https://middletownpollinatorpathway.com Kathy Meyering Mountain Laurel

#### **Owl's Hill Nature Sanctuary**

https://www.owlshill.org Susan Duvenhage Middle Tennessee

#### **Pollinator Friendly Alliance**

https://www.pollinatorfriendly.org Laurie Schneider St. Croix Oak Savanna

#### **River Bend Gardens**

https://riverbendgardens.org Wayne Oliver Ann Arbor

#### **Rochester Garden Club**

https://rochestergardenclub.org/ Jane Giblin North Oakland

# Sherrard High School/Sherrard School District, Illinois

https://www.sherrard.us Thomas Thompson Quad Cities

#### WebbedFoot Designs, Inc.

https://webbedfootdesigns.com Raymond Stewart Greater Cleveland

#### **NEW LIFETIME MEMBERS**

**Kathy Daniel & David Braun**, Chesapeake Bay Western Shore (Seedling), Maryland

Peggy Dankert, Ann Arbor, Michigan

Patsy Hirsch, Greater Kane County, Illinois

Anne McDonald, Front Range, Colorado

Alicia Ploetz-Griebenow & Brian Griebenow, Green Bay, Wisconsin,

Nancy Roggers, River City-Grand Rapids Area, Michigan

**Diane Scher**, Middle Tennessee, Tennessee

Kayla Velo, Greater DuPage, Illinois

Jaima Galfi, Illinois Prairie, Illinois

James Hewitt, Red Cedar,

Jennie Rabinowitz, Midcoast Maine, Maine

#### COMMEMORATIONS

#### In honor of

Matt Carpenter, from Joe Martin Bonnie, from Lynn Simarski Karen McIntyre, from Amy Bain Sue Olsen, from Christine Maloney Dan Kinker, from Julia Kinker

Marilyn Torkelson, from Rebecca Ziegler

Jodi Magalski, from Amy Roth

Courtney Spradlin, from Sarah Reilly

Pollinator Friendly Yard groups on Facebook, from Charissa West

Wild Ones Team and Board, from Sharon Storbeck

Chris Shepard, from Jacquelyn Gutc

Sharon, from Anonymous

Marney Bruce, from Caryl McNeilly

Larry Jacobi, from Stephanie Sack

Joel Dunnette, fromTerri Dugan

#### In memory of

Kathryn Salmi, from Josh Hill

Kenneth Arnold, from Holly Peterson, Andrew Huber, Anonymous, Marissa Baskett, Art Kuljian, Minda Te and Michael Kurpinksi

Henry A. Goecks, from Jessica Harmon

Martha Lunz, from Rae Sweet

Carol Phelps, from Ann Nowak

Mary Hall, from Anonymous

Ruth Kelley, from Mary Kelly

Debbie Mullen, from Theresa E. Frice

June and Russell Meece, from Melisssa Wilson

Larry Jacobi, from Larry and Carol Horbinski, Alison Christ, Maxwell Schaefer, David Yee, Bradley Barr and Mary J. Schultz

Mark Webb, from Patricia Webb

# Thank You for Your Support of Wild Ones' 2022 Annual Appeal

Thank you for making a gift to Wild Ones during our annual appeal. Your financial support of Wild Ones shows your deep commitment to our mission! Wild Ones depends on the generous support of members and supporters to raise public awareness of the essential role of native plants have in sustaining ecosystems and to inspire both individual and collective action to change the landscapes of the future! Supporters are proudly published in the News section of our website: <a href="https://wildones.org/2022-annual-appeal/">https://wildones.org/2022-annual-appeal/</a>.



