

# North Country Gardeners

UW-EXTENSION COOPERATIVE EXTENSION BURNETT, SAWYER, & WASHBURN COUNTIES ISSUE 33, AUGUST 2016



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## Greetings, gardeners

Here we are into August 2016 in the height of the growing season. Wow, what a summer it's been! Adequate heat, rain, and bright sunny days have given us perhaps one of the better growing seasons in recent memory. We just returned from the Teaching & Display Gardens at the Spooner Agriculture Research Station and are they looking fantastic! There are some of the best displays of vegetables we have ever had, thanks in part to our participation in vegetable variety trials with UW-Madison, All America Selections (AAS) organization, and our UW-Extension Master Gardener Volunteers.

As with all projects we are so very fortunate to have two wonderful hard-working student interns with us this summer. Hannah Meister is a crops and soils student from UW-Platteville, and Payton Ertl is a horticulture student from UW-River Falls. Their efforts along with the MGVs have resulted in some spectacular displays of plants.

The AAS flowers are just coming into their own, with many in full spectacular bloom. This is the fourth year North Country Master Gardeners are entering the AAS landscape design contest. Pollinator education is this year's theme, which is a perfect match for our continued efforts toward focusing on natural gardening methods including crop rotations, cover crops, pollinator-friendly techniques and plantings, natural organic mulching, and composting. Some of the beds are planted with selected flowers to highlight shapes of a monarch butterfly, bumble bee, moth, and hummingbird. Stop by and see if you can find them.

Perhaps our most noteworthy garden this year is our newly renovated Monarch and Pollinator Sanctuary (MAPS) garden. Last fall we removed nearly all of our roses and other woody and herbaceous perennial flowers. The beds were redesigned to contain native plants friendly to native and non-native pollinators. This renovation has also qualified the MAPS to be certified and registered with the Monarch Watch Organization as an official Monarch Waystation. It's a huge change for the perennial garden but one we hope the public will enjoy for years to come.

As we do each summer, we welcome visitors to our Teaching & Display Gardens and are providing more educational events in the garden each year. This year we have already hosted several school and community groups, have continued the popular Meet Me in the Garden Series, and, of course, are looking forward to our 18th annual Twilight Garden Tour on Tuesday Aug. 16. This year's event includes an added Speaker Symposium from 1 to 3:30 p.m. indoors at the Spooner Ag Research Station auditorium followed by the Twilight Tour from 4 p.m. to dusk, weather permitting.

We invite everyone to stop by anytime for a visit to walk through the gardens, and consider attending some of our events. The next two months will be prime viewing out in the gardens.

Happy gardening!

**Kevin Schoessow**  
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**Russ Parker**  
President of North Country Master  
Gardener Volunteers Association

# 'Meet Me in the Garden': Get involved by gardening for pollinators

By Sue Reinardy

The final program of Meet Me in the Garden is Saturday, September 10 at 10:00-12:00 at the Spooner Agriculture Research Station Teaching and Display Garden. The focus this season has been on pollinators and this program will challenge you to become more involved by supporting wildlife and pollinators in your own garden.

Master Gardener Volunteers will discuss how to create a sustainable

habitat, becoming a citizen scientist, and the many ways to support the environment, wildlife and beneficial pollinators. The program will also discuss the year in review of what has happened in our gardens and provide tips on how to finish the gardening season. A number of new native plants were introduced in the Teaching and Display Garden to create a designated Monarch Waystation and Pollinator Garden. This is a good opportunity to see how

they have fared and what you might want to add to your own garden.

Please bring your own chair for the program in the garden. The Teaching and Display Garden can be found at N5264 Orchard Lane, located 1 ½ miles east of Spooner on Highway 70 or half-mile west of Highway 70/63 interchange. In case of inclement weather, the program will relocate to the Station Building at W6646 Highway 70, Spooner.

## Bug houses: An alternative to debris

By Sue Reinardy

There are several basic gardening practices when supporting pollinators in your garden: provide a variety native plants in a sunny location, plant big patches of the same plants for foraging efficiency, avoid pesticides and herbicides, and provide habitat in the form of small piles of branches or debris. If leaving plant debris around your garden is not possible – think about putting up some bug houses as an attractive alternative.

What is a “bug house”? The Webster dictionary defines it as slang for “crazy” or “mentally deranged.” Wikipedia’s definition is more on target: “An insect hotel is a manmade structure created from natural materials intended to provide shelter for insects.” Apparently this is very popular in England. An Internet search reveals an amazing variety and much creativity with the houses.

Bug houses can be any size to be effective. Insects do have their preferences. Bumblebees prefer to nest near the ground in a warm, sheltered space such as along a fence or near a hedge. They like their nests to have plenty of air circulation and nesting material such as dry moss. Bundles of bamboo canes provide good nest sites



**Bug House at the Spooner Research Station Teaching and Display Garden.** Photo by Sue Reinardy

for solitary bees. A log with holes drilled into it can provide nests for wood-boring beetle larvae, spiders, ladybugs, and lacewings – all benefi-

cial insects for the garden.

Support pollinators by adding some bug habitat to your gardens.

# Starting seeds outside, in winter

By Sue Reinardy

Usually gardeners begin seeds indoors to get an early start on the next season. The standard process is to start the seeds the appropriate number of weeks for each variety so they reach the transplant stage when the danger of frost is past. If you are not blessed with a greenhouse, there is also the investment in grow lights and an appropriate space for this activity. This can be difficult or impossible for some gardeners who are either not home during the appropriate months or do not have the space.

There is an alternative: the winter sowing method. This is a method developed and well-documented by Trudi Greissle Davidoff, who lives in the state of New York. She developed it because she lived in a small cottage, had a cat who liked to dig, and loved to trade seeds and grow her own. She experimented with trying to start seeds outdoors.

Recently I used her method and found it easy to follow. I planted kale, spinach, bok choy, and zinnias and placed them in covered containers outside in February.

The cool-season plants did well; they emerged in mid-April and were ready for transplanting in late-May. Neither sub-zero temperatures nor



**Pictures are of milk jug seed container cut in half, and then taped shut until weather was warm enough to expose the seedlings to the elements. The container had drainage holes on the bottom. Leaving the cover off and side slits provided the necessary air circulation.**

snow caused them harm. We had generous spring rains, and I only had to water them a few times to keep them moist. I also removed the top on warm days and replaced it when temperatures went below the freezing point. Since they were outside there was no need to acclimate them before transplanting in the garden.

The zinnias did not germinate,

which was to be expected since they require high temperatures that are not available outdoors in our early spring.

The best seeds for this method are those that are either native perennials to our area or those considered cold hardy. If you want to try this method for the 2017 season check out the website [wintersown.org](http://wintersown.org) and follow the instructions.

## AAS garden entered into landscape design contest again

By Terri Strand

The AAS display garden has been planted. It was decided to enter the AAS display garden contest again this year.

The theme for this year was pollinators. Four of the beds have been designed to represent four different pollinators. One is designed with a bee, one is designed with a moth, one is designed with a hummingbird, and one is designed with a monarch butterfly in it. Master garden volunteers designed and planted the gardens.

Come and visit the display garden and see if you can see the designs. The flowers are beginning to look beautiful.



# Display Garden is completely revamped: Now qualifies as a Monarch and Pollinator Sanctuary

By Sharon Tarras

North Country Master Gardener Volunteers have transformed our 16-year-old, 50-by-60-foot perennial display garden into a spectacular habitat for monarch butterflies and other pollinators such as bees, moths, flies, and birds. The monarch butterfly is a flagship species for conservation according to national partnership Monarch Joint Venture, which uses the social and cultural presence of monarchs to promote conservation for all pollinators. Pollinators love and need sunshine, shelter, milkweed and other nectar plants, and natural habitat.

All of these elements have been incorporated into the newly established MAPS garden, with many of our native plants purchased with grant money. After 10 months of planning, researching, preparing, and planting, MAPS is complete. We welcome you to tour and enjoy the garden, which we plan to register as a certified Monarch Waystation.

We added these aspects of a polli-

nator-friendly landscape, as excerpted from [Pollinatorgardens.org](http://Pollinatorgardens.org):

- Include native plants.
- Diversify bloom times. Early- and late-blooming plants are especially important.
- Include a variety of flower shapes and sizes.
- Color counts. Bees are attracted to blues, yellows, and whites. Butterflies and hummingbirds are attracted to reds.
- Be cautious of native cultivars. Try to select those cultivars that are similar to the species in flower color, size, shape, and bloom period.
- Plant in masses. Group a minimum of five to seven plants of the same species together.
- Enhance nesting opportunities. Keep some bare soil, consider nesting boxes, and maintain a nearby water source.
- Create microclimates. A good southeastern exposure with protection from prevailing winds is best.
- Cut back perennials in spring. This allows nesting sites for pollina-

tors and seed sources for birds.

Annie S. White, PhD student at the University of Vermont, concludes that generally hybrid varieties and double-flowered varieties are much less attractive to pollinators than true natives. Our plant list was created with the above considerations in mind. Nearly all our new plantings are native plants. We kept a dying Nanking cherry and added a bug house to enhance nesting opportunities. The AAS planting next to the garden contains a birdbath and open soil. We removed two birch trees, three groundcover junipers, and some perennials that were determined to be of little value to the new space. The birch tree removal opened up the space for more sunlight, and we kept several shrubs to provide shelter from winds.

Many native plant lists can be found on the internet. It is important to find plants that are not only native, but native to your area. [prairienursery.com](http://prairienursery.com) is a good source of info for native plants in Wisconsin.



# MAPS Flowers and Grasses

botanical name	common name	
<i>Achillea millefolium</i>	Yarrow	native plant
<i>Agastache foeniculum</i>	Anise Hyssop	native plant
<i>Anemone tomentosa</i> 'Robustissima'	Robustissima Anemone	
<i>Aquilegia canadensis</i>	Wild Columbine	native plant
<i>Asclepias incarnata</i>	Red Milkweed	native plant
<i>Asclepias sullivantii</i>	Prairie Milkweed	native plant
<i>Asclepias tuberosa</i>	Butterfly Weed	native plant
<i>Aster laevis</i>	Smooth Aster	native plant
<i>Aster macrophyllus</i>	Big Leaf Aster	native plant
<i>Aster novae-angliae</i>	New England Aster	native plant
<i>Baptisia australis</i>	Blue Wild Indigo	native plant
<i>Calamagrostis acutiflora</i> 'Karl Foerster'	Karl Foerster Feather Reed Grass	
<i>Chelone lyonii</i> 'Hot Lips'	Hotlips Turtlehead	cultivar of native
<i>Coreopsis lanceolata</i>	Lance Leaf Coreopsis	native plant
<i>Dalea purpurea</i>	Purple Prairie Clover	native plant
<i>Echinacea purpurea</i>	Purple Coneflower	native plant
<i>Echinacea purpurea</i> 'Bravado'	Bravado Purple Coneflower	cultivar of native
<i>Eupatorium purpureum</i>	Purple Joe Pye Weed	native plant
<i>Festuca glauca</i>	Blue Fescue	
<i>Gaillardia Mesa Bright Bicolor</i>	Blanket Flower	cultivar of native
<i>Geranium x cantabrigiense</i> 'Biokovo'	Biokovo Geranium, Cranesbill	
<i>Helenium autumnale</i> 'Red Jewel'	Red Jewel Helenium, Sneezeweed	cultivar of native
<i>Helictotrichon sempervirens</i>	Blue Oat Grass	
<i>Heliopsis helianthoides</i>	False Sunflower	native plant
<i>Hibiscus</i> 'Summer Storm'	Summer Storm Hibiscus	
<i>Liatris ligulistylus</i>	Meadow Blazing Star	native plant
<i>Liatris spicata</i> 'Kobold'	Gayfeather, Liatris	cultivar of native
<i>Malva alcea</i>	Hollyhock Mallow	
<i>Monarda fistulosa</i>	Wild Bergamot	native plant
<i>Nepeta x fassenii</i> 'Walker's Low'	Walker's Low Catmint	
<i>Penstemon digitalis</i>	Smooth Penstemon	native plant
<i>Paeonia lactiflora</i> 'Dr Alex Fleming'	Alex Fleming Peony	
<i>Paeonia lactiflora</i> 'Karl Rosenfield'	Karl Rosenfield Peony	
<i>Paeonia lactiflora</i> 'Sarah Bernhardt'	Sarah Bernhardt Peony	
<i>Paeonia suffruticosa</i> 'Shimadaijin'	Shimadaijin Tree Peony	
<i>Panicum virgatum</i> 'Heavy Metal'	Heavy Metal Switchgrass	cultivar of native
<i>Phlox paniculata</i>	Sandy's Pink Phlox	
<i>Phlox pilosa</i>	Prairie Phlox	native plant
<i>Rudbeckia fulgida</i> 'Goldsturm'	Black Eyed Susan	cultivar of native
<i>Rudbeckia hirta</i>	Black Eyed Susan	native plant
<i>Salvia nemerosa</i> 'Caradonna'	Caradonna Salvia, Meadow Sage	
<i>Schizachyrium scoparium</i>	Little Bluestem	native plant
<i>Sedum</i> 'Autumn Fire'	Autumn Fire Sedum	
<i>Solidago speciosa</i>	Showy Goldenrod	native plant
<i>Sporobolus heterolepis</i>	Prairie Dropseed	native plant
<i>Verbena stricta</i>	Hoary Vervain	native plant
<i>Veronicastrum</i>	Culver's root	native plant



Purple Coneflower



Blanket Flower



Gayfeather, Liatris

## Sites of interest

- [naba.org](http://naba.org)
- [wisconsinbutterflies.org](http://wisconsinbutterflies.org)
- [butterfliesandmoths.org](http://butterfliesandmoths.org)
- [monarchwatch.org](http://monarchwatch.org)
- [monarchlab.org](http://monarchlab.org)
- [monarchnet.org](http://monarchnet.org)
- [plantmilkweed.org](http://plantmilkweed.org)
- [plantnative.org](http://plantnative.org)
- [monarchjointventure.org](http://monarchjointventure.org)
- [journeynorth.org](http://journeynorth.org)
- [pollinator.org](http://pollinator.org)

# Pennies help keep bird bath algae-free

By Sue Reinardy

One evening on our patio my husband observed that our ceramic birdbath had the bowl leaning up next to the base. He commented that it was probably difficult for the birds to actually use it that way. This was my solution to keeping it clean. In the other direction is a copper birdbath that we have had for decades that stays out all year round and is easily cleaned with a swift stream of water from the hose and isn't damaged by frozen water in the bowl. This led to some research on whether copper could prevent algae from growing in the ceramic bath.

After some internet research we discovered a number of recommendations including the use of pennies. So we set up an experiment with four white plastic buckets with differing amounts of pennies to see if it really worked. The four buckets included one with no pennies for our control and then the other three had one, six, or 12 pennies. Each bucket had the same amount of water similar in volume to the bird bath. The pennies were all dated prior to 1982 when the U.S. mints changed the copper content from at least 95 percent to 2.5 percent. Copper is a natural algacide. Copper pipes or tubing is another source of copper for this purpose.

After four weeks there was a noticeable difference between the bucket with no pennies and the one with 12. While the 12 pennies did not prevent algae, they did dramatically reduce the growth.

Here are the results:

- Twelve pennies – fairly clean with a minor amount of algae forming on the side and bottom of the bucket.
- Six pennies – algae on the side, bottom, and floating in the bucket.
- One penny – significant algae on side, bottom, and floating.
- No pennies – same as one penny.

Algae forms from spores off of trees, from bird droppings, or from



**Results from swiping side of buckets, the numbers indicate the number of pennies in the buckets.** Photos by Sue Reinardy

the wind. It grows best in a sunny spot, so moving a bath to an open shaded area will reduce growth. It is recommended to replace the water every day or two to keep it fresh. Clean the bath every few weeks with either a vinegar or bleach and water mix (one part vinegar or bleach and nine parts water). There are also a number of commercial products available for cleaning.

Birds appreciate a structure such as trellis, shrub, or small tree nearby for shelter and protection. Avoid siting the bath near a bird feeder since droppings will dirty the bath quicker. Heated bird baths in the winter months will ensure a consistent source of water for birds. The bath should be no more than two or three inches deep. The edge should be rough since birds do not like slippery surfaces. You can add stones to the bottom of the bath or rough up

the edges if yours are too deep or slippery.

For a few cents and some common household products you can keep your bird baths clean and attractive.





**Volunteers took part in the Family Fun Fest in Spooner (left) and the Hunt Hill Audubon Sanctuary Praire Fling in the spring.**  
Photos by Vicki Gee-Treft

## Regional MG conference will be in Wisconsin Dells

By Sue Reinardy

We are fortunate to have the Upper Midwest Regional Conference in Wisconsin Dells this year on September 14-17. The conference rotates through the four member states (Iowa, Illinois, Minnesota, and Wisconsin).

The theme is "Helping Nature Thrive," and the conference will feature area garden tours, educational sessions, and expert speakers. This is a wonderful opportunity to tour the natural wonders around the Dells area and hear from great speakers.

The conference will be held at the Chula Vista Resort. It opens with a choice of area tours on Thursday and finishes that day with keynote speaker Jerry Aps who is a noted Wisconsin author and historian.

Friday opens with keynote speaker Stanley Temple from the Aldo Leopold Foundation and finishes with three educational sessions offering a wide choice of topics.

The conference finishes on Saturday morning with a final educational

session and keynote speaker Mike Maddox, Wisconsin Master Gardener program director.

As an added bonus a fall festival will be held in the Dells on September 16-18. Wo-Zha-Wa Days is filled with free family activities, including an arts and crafts fair, antique flea market, Maxwell Street Days, live entertainment, and a parade.

Information is at <https://midwestmgconference.wordpress.com/>

## Twilight Tour, Speaker Symposium set for Aug. 16

The University of Wisconsin-Extension, Spooner Agriculture Research Station, and North Country Master Gardener Volunteers will hold their 18th annual Twilight Garden Tour and first annual Horticulture Speaker Symposium on Tuesday, Aug. 16, starting at 1 p.m. This is one of the region's premier summer gardening events.

The Symposium will be held indoors at the Spooner Station meeting room from 1 to 3:30 p.m., followed by the Twilight Garden Tour from 4 to 7 p.m. in the award-winning Teaching & Display Garden.

The Symposium will include presentations on herbs, backyard fruit, vegetables, native bees as pollinators, and the role of dragonflies in the garden.

The Twilight Tour includes speak-

ers, displays, demonstrations, and tasting of fresh garden salsa and grilled vegetables. Master Gardener Volunteers and invited speakers will be available to answer gardening questions and identify plant, insect, and disease samples.

The Teaching & Display Garden is an official All-America Selections (AAS) display garden featuring both flowers and vegetables and was awarded a second-place finish in 2013 and 2015 and a first-place finish in 2014 in a National Landscape Design contest sponsored by AAS.

The garden also includes organic vegetable gardening, adaptive and container gardening, table and wine grapes, fruit trees, and the newly renovated Monarch and Pollinator Sanctuary perennial garden.

Invited speakers for both events

are Brian Smith, UW-Extension fruit and vegetable specialist from UW-River Falls; Erin Sylva, UW-Extension organic crop production specialist from UW-Madison; Ami Thompson, conservation biologist from the University of MN; Jacki Maher, horticulture student from UW-River Falls; and Lois Ristow, herbalist from Chetek.

As in the past, no fee is charged for either educational event.

The Teaching and Display Gardens are located on Orchard Lane, one mile east of Spooner on Hwy. 70. Watch for Garden Tour signs. For more information: Kevin Schoessow, 715-635-3506 or 800-528-1914; <http://spooner.ars.wisc.edu/events/twilight-garden-tour/>; or on Facebook at <https://www.facebook.com/spoonerag>.

# 'Last biotic frontier' is amazingly diverse

By Hannah Meister  
Summer intern

Soil is our growing media. It anchors and supports plants and acts as the reservoir which holds and releases the nutrients that plants need to grow. Soil is a vast, unexplored resource; some scientists have dubbed soil as the last biotic frontier.

As we continue to study soil, it continues to astonish us. What is soil really? Surprisingly, 50 percent of a healthy soil is made up of air and water (pore space) while the other 50 percent is largely made up of old broken down rock (minerals), with just a small percentage being organic matter (plant and animal remains).

We don't generally think of soil as being alive, but the living component of soil gives it some of its finest and strangest properties. Life can be found throughout the soil and can come in a range of different sizes. We may observe earthworms, insects, and rodents, but what we don't see is the bacteria, protozoa, and fungi. In just one teaspoon of healthy soil there can be billions of microorganisms. These microscopic organisms are at the bottom of the food web and are therefore a cornerstone for all life on earth.

It's hard to imagine that creatures so tiny could have such a huge role to play on our planet and in our backyards, yet there is an intricate interconnectedness below our feet.

Historically, science has labeled soil life into a broad group called decomposers. Decomposing, storing, and recycling the remains of plants and animals is certainly one responsibility, and without our "decomposers" plant and animal debris would very quickly start to build up all around us, but scientists continue to discover the many other amazing things that soil organisms do.

Soil microbes are able to convert nutrient materials from a form that is unusable to plants to one that is ready for uptake. As microbes recycle materials they create a stable soil structure which has many benefits for gardeners, including better water retention.

Microorganisms have a big role to play in filtering and buffering water, pathogens, and toxins that infiltrate the soil. They are able to degrade harmful substances. They are even used in bioremediation, which uses microbes to consume and break down environmental pollutants, in order to clean up a polluted site.

There is new and promising re-

search which proposes that soil may act as an immune system to plants. Soil can be thought of as a kind of extension of the plant itself. If the soil is healthy, stable, and bio-diverse, it creates an environment that supports plant health. A healthy population of beneficial microbes will outcompete pathogens. Some beneficial microbes produce antibiotics and other similar substances that can kill harmful microbes. After all, many of our life-saving antibiotics were discovered in the soil!

It's not hard to see how supporting soil life could benefit the home garden and even the planet as a whole. In any system, biodiversity creates stability. By promoting an abundant and diverse population of microorganisms we will create a more self-reliant system that will need less input from us as gardeners.

In order to support our soil life we need to make sure the microorganisms have food to eat. We can do this by adding organic matter to our gardens. Using composts and mulches are easy ways to add organic matter. Also, when possible, avoid spraying pesticides or disturbing the soil and use natural fertilizers when feasible.

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## Master Gardener Volunteer timesheets due soon

Thank you to everyone who has volunteered this gardening season. There is one more activity for all Master Gardener Volunteers to complete: Fill out your 2016 timesheet and send it to the Spooner office.

Here are the steps:

- Download a copy of the current timesheet from: <http://wimastergardener.org/about-hours/>.
- List your volunteer activities and continuing education hours. Master Gardeners will be recertified who have completed at least 24 hours of youth education, adult education or community service and 10 hours of continuing education. Even if you

miss a year you can recertify if you complete the hours the next year.

The volunteer year is October 1 through September 30. However, since we need to submit reports before September 30 – you can either anticipate or report them the following year.

- Send the timesheet by September 15 to: Kevin Schoessow, Spooner Agriculture Research Station, W6646 Hwy. 70, Spooner, WI 54801.

Our contributions are important to our communities, and as government resources continue to be stretched, accounting for these services helps the Master Gardener program be

accountable to decision makers.

According to Wisconsin Master Garden Program Coordinator Susan Mahr: "This is a government-funded program, with UW-Extension, and as with any other public-funded program we have to show taxpayers how their money is being spent and any returns on their investment. All of the contributions of MGVs throughout the state are compiled annually in an annual accomplishment report that documents the contributions of MGVs in their communities and the value of that service to the public. The more accurately we can portray the program, the better."