

North Country Gardeners

UW-EXTENSION COOPERATIVE EXTENSION BURNETT, SAWYER, AND WASHBURN COUNTIES | ISSUE 34, MAY 2017



Greetings

It's spring and we have accomplishments to celebrate and work to do!

We begin this season with a focus on "Foodscaping: Interspersing Edibles in the Ornamental Garden," the theme for the All America Selections Design competition in 2017. Our AAS garden this year will be designed for us to participate in the contest again this year. Historically we have received top honors for our size garden, and plan to again. Foodscaping will be the theme for many events this season.

In 2016 the perennial portion of the Spooner Ag Station Teaching and Display Garden was redesigned as a Monarch and Pollinator Sanctuary (MAPS), and became a Certified Monarch Waystation. What an exciting and rewarding project, one that can continue to help positively impact the future of the monarchs and other pollinators. Many thanks to all involved.

Our annual plant sale is May 20 – peppers, tomatoes, and perennials will be available. We are creating a new "Family Garden" with grant money received for hardscape materials, and we'll be hosting our Twilight Garden tour on August 15.

Congratulations to our 12 Level 1 MGV Trainees, who finish the training at the end of May. Nothing but rave reviews for leaders Sue Reinardy, Vicki Gee-Treft, and Russ Parker.

Our primary resource for NCMGV information is our website, www.northcountryMGV.org – find meetings and event dates, volunteer and educational opportunities, and other great information. Kudos to our webmaster, Sue Reinardy, for creating and maintaining the site.

We are looking forward to a happy and healthy season – let's have fun. Your time, talents, ideas, and skills are key to our success!

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Plant sale to offer trusted varieties, surprises

By Carol Taylor, MGv

The date is set for the annual North Country Master Gardener Volunteer Association (NCGVA) plant sale on Saturday, May 20 from 8 a.m. until sold out. We will be featuring an assortment of our time-tested heirloom tomatoes such as Mexico Midget, Brandywine, and Roma.

Also for sale will be a smaller selection of some of our favorite short-season peppers including New Ace, Giant Marconi, King of the North, and others.

If you paid a visit to the Teaching and Display Garden last year, you may have noticed some short but

stocky tomato plants. NCGVA member Russ Parker found an international hybridizing effort to produce dwarf tomato plants producing full-size tomatoes. The dwarf tomato project growers made selections from the initial crosses and from subsequent generations. Several of these dwarf tomatoes are now offered as stabilized open-pollinated varieties, Victory Seeds being our source.

We experienced mixed results in those that we trialed at the display garden but attribute that in part due to compromised plants that were held too long in small pots until planting out.

Russ and I also grew some at our

homes in containers with great success. Our favorite variety Uluru Ochre will be offered for sale. They are prolific producers resulting in many tomatoes weighing over a pound. Not a traditional "red" tomato, they have green shoulders and a dappled dark red but are delicious.

We do recommend that you stake or cage these plants, which grew to only 3 to 4 feet tall.

Also included in the sale are a limited number of perennials such as hostas, cranesbill, and daylilies. More information and a plant list is available at northcountrymgv.org under the Events tab.

Come early – we sell out quickly.

Ornamental edibles headline Meet Me in the Garden

By Sue Reinardy, MGv

Join Master Gardener Volunteers on Thursday, July 13, from 6 to 7:30 p.m. at the Spooner Research Station Teaching and Display Garden for a program on "Ornamental Edibles." The program will highlight plants that provide good looks and are tasty. Some edible weeds may even be profiled. Many edibles are suitable for containers or can be added to the perennial garden.

This year's theme for the Spooner Research Station Teaching and Display Garden is "Foodscaping: Interspersing Edibles in the Ornamental Garden." The theme is adapted from the All America Selections Landscape Design Contest. The Teaching and Display Garden is a multi-year winner for this contest.

Master Gardener Volunteers and University of Wisconsin-Extension staff will be available to answer questions during the program.

Remember to bring your own lawn chair. The session is free and open to the public and will be held rain or shine. In case of inclement weather, the program will be held at the Station Building at W6646 Hwy. 70, Spooner. The garden is located a half mile north of Hwy. 70 on Orchard



A program in the Teaching and Display Garden in 2016 drew a crowd of learners. Photo by Sue Reinardy

Lane. Orchard Lane is located 1.5 miles east of Spooner on Hwy. 70 or

a half mile west of the Hwy. 70/53 interchange.

Watch for garden meeting signs.

Family Garden: An extraordinary tool

Volunteers needed to create the new space

The new Family Garden will provide opportunities for education in all disciplines including STEM (science, technology, engineering, math), art, music, and writing skills. The garden also will include plant materials that will engage the five senses.

A circular layout for this garden is proposed which will provide a basis for math: angles, the relationship between diameter, circumference, and pi. This arrangement also will help students develop a map sense as it can be used in conjunction with a compass to help learn directions.

A pole will be set at the axis of the circle around which a sunflower planting will provide for an open area, creating the sunflower room or the children's imagination room to be accessed by arbors that will be planted with pole beans or climbing nasturtiums.

The center pole also provides a means for teaching right angle triangles and measuring sunflower height.

The sunflower room can be trans-

formed bi-annually into the bean room by adding circumferential poles secured to the mast for trellising the beans.

Additional ideas for the Family Garden are colorful benches, a "yardstick" to show the growth of plants, and colorful plantings that will appeal to children. We will provide hands-on education for a wide range of topics in the near future.

Our planting and hardscape work will be concentrated at the end of May – early June. Volunteers are needed.

This 1,300-square foot circular area will include flowing beds, colorful displays, benches, and arbors that lead into a central feature. The themes in this space will vary every two years and have a focus, such as a Smelly Garden, an Animal theme garden, an Alphabet garden, and Pollinator's Paradise.

We also will have a mailbox with written exercises for various ages along with magnifiers, pencils, paper, clip boards, measuring tools, etc.

Signage and ultimately the use of this space will be to appeal to children. This Family Garden is associated with our larger Teaching and Display Garden located on Orchard Lane, which is a joint project between UW-Madison's Spooner Ag Research Station, UW-Extension, and North Country Master Gardener Volunteers.

WORKS FOR US

Tips from Julie Hustvet

If your perennial garden looks blah between bouts of blooming, amp up the contrast through foliage so the garden isn't just a sea of indistinct green.

Pair large leaves next to small, filmy plants next to visually hefty ones, strappy leaves next to most anything. Mix together plants with different leaf shapes.

Contrast the plants' overall shape, too: Mix round, spiked, matting, conical, mounding, and fountain-like shapes.

Lightning feeds plants by fixing nitrogen in soil

By Vicki Gee-Treft, MGV

Nitrogen accounts for over 78 percent of the atmospheric gas on Earth. But despite its great abundance as a gas, nitrogen is often a limiting factor in plant growth. Nitrogen is essential to plant growth but cannot be obtained by plants in the gaseous form.

Aside from additions to the soil, nitrogen is converted to plant available forms "fixed" in two different ways. The first is through nitrogen fixing rhizobia bacterial which convert atmospheric nitrogen (N_2) to compounds that plants can use. And the second natural nitrogen source is by lightning.

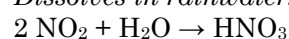
How lightning fixes nitrogen

When lightning strikes in the atmosphere, gaseous nitrogen (N_2) is converted to an oxidized form ($2NO$). It then combines with oxygen to form nitrogen dioxide ($2NO_2$). This form of nitrogen easily dissolves in rainwater and falls to the ground as nitric acid (HNO_3). It then reacts with soil to form nitrates that are readily available for plant uptake. The equations can be seen below.

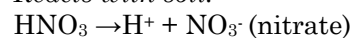
Lightning strikes and nitrogen is oxidized: $N_2 + O_2 \rightarrow 2NO$

Combines with oxygen: $2NO + O_2 \rightarrow 2NO_2$

Dissolves in rainwater:



Reacts with soil:



Significant source of nitrogen?

Quantifying the amount of nitrogen fixed by lightning has proven to be a challenge to scientists, and there are still differences in theories. One estimate is that about 4 percent of the total nitrogen fixed to the soil is caused by lightning. While this number represents only a small fraction, it should not be disregarded.



(Above) An example of Knot-wilgen or pollarding in the Keukenhof Garden, Lisse, The Netherlands. Photos by Sue Reinardy, MGV

How many foreign gardening terms do you know?

By Sue Reinardy, MGV

As gardeners we need to know several foreign languages, most notably Latin, since the botanical names are in that language. This comes in handy when in a foreign country and touring gardens since the names are all familiar.

It is also just as handy at our local garden center because it avoids the confusion of common names that



(Top) George Washington's garden at Mount Vernon, with an example of a potager including both vegetables and ornamentals plus a parterre, a formal patterned garden with boxwood, in the background. (Below) A Belgium Fence in Bruges, Belgium.

may or may not be exactly what you are seeking in a plant.

In addition to Latin, it is handy to know a little French and Italian and Dutch.

Check your knowledge to see how many of these you know.

Espalier – According to Wikipedia, "The word espalier is French, and it comes from the Italian spalli-

era, meaning 'something to rest the shoulder (spalla) against.'"

This practice is followed worldwide and involves pruning and controlling a woody plant on a flat plane either against a wall or along wires. This method has been used with

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Foreign terms

From page 4

grapes especially over many centuries.

Belgium Fence – Although not a foreign word it is another method of espalier used in Belgium and The Netherlands to create living wind-breaks and fences. A similar method is used in other parts of the world for living fences.

Potager – Potager is a French word for a kitchen garden with ornamental elements including flowers and herbs.

Parterre – A French term for a low, level, formally patterned garden.

Giardino segreto – An Italian term meaning “secret garden.” This is an often walled or hedged area meant to provide a private place for meditation.

Limonaia – This is an Italian term for lemon house, a building where citrus trees are moved in the winter months to protect them from freezing temperatures. The French term is orangerie.

Knotwilgen – A Dutch term for pollarding, especially willow trees. This is a method of tree topping that is popular in Europe.

Eric Muecke, a registered forester with the North Carolina Forest Service provides some insight with this quote: “The history of it goes back to when they would build walls around cities and they would have limited room for trees, so they would do pollarding. That would keep the tree small, and it would provide them with a continual little harvest of the small branches that grew, for heating and for cooking.”

Tree topping or pollarding is not recommended by tree experts here because it reduces the health and life of the tree in most cases.

You can have some fun with these terms and name parts of your own garden. A kitchen garden seems a lot more exotic when called a potager. And who wouldn't want a giardino segreto as your own private garden retreat?

Jumping worms pose a danger

By Sue Reinardy, MGV

It's in the news and hopefully not in your garden. All worms are non-natives in Wisconsin, but this particular one is especially aggressive. They were first found in Wisconsin in 2013 and already gardeners in the southern parts of the state are dismayed at the damage they are doing in their gardens. The Wisconsin Department of Natural Resources has already restricted them in their rule NR 40 meaning this invasive species has already established in the state and causes or has the potential to cause significant environmental harm.

The name (jumping worm) says it all. These worms jump and wiggle around. They eat all the nutrients in the soil, leaving little for plant life. Those gardeners that have had the experience describe their plants going limp since they have no food and the soil is like sand so moisture retention is a problem. There is no known remedy to get rid of this pest.

The Wisconsin Department of Natural Resources has an excellent website with good information at <http://dnr.wi.gov/topic/invasives/fact/jumpingWorm/index.html>.

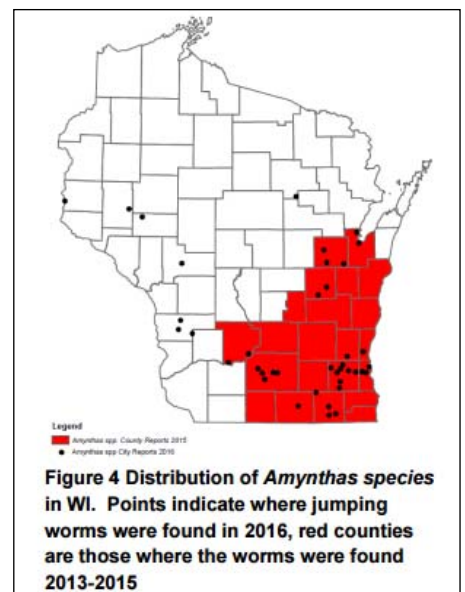
The DNR also provides these tips to stop the spread of the worm.

- Educate yourself and others to recognize jumping worms.
- Watch for jumping worms and signs of their presence.
- Arrive clean, leave clean. Clean soil and debris from vehicles, equipment, and personal gear before moving to and from a work or recreational area.
- Only use, sell, plant, purchase or trade landscape and gardening materials and plants that appear to be free of jumping worms.
- Only sell, purchase or trade compost that was heated to appropriate temperatures and duration following protocols that reduce pathogens.



There have been no reports (yet) of these worms in our area; the closest report is Chippewa Falls. There have been reports of cancellation of plant sales in the Madison area due to the concern of spreading the worm. Let's all do our part to avoid this invasive worm by following the DNR tips to stop the spread.

From: Wisconsin DNR Forest Health 2016 Annual Report



Volunteers needed to help local community farm that donates its produce to food pantry

By Nikki Halverson, MGV Trainee

Tucked away by the Yellow River, just south of Spooner Lake, there is a two-acre garden that is providing fresh produce to the Indianhead Community Action Agency (ICAA) food pantry. The garden is owned by Lou Schneider and is run by him and a small team of dedicated volunteers, which I volunteer too.

I met Lou last spring while I was volunteering for Americorps – Farm to School Program in the Spooner Area School District, and I took my summer school kids to his garden as a field trip to learn about potato bug identification and weeding.

As a thank you for the students' hard work, at harvest season Lou donated several boxes of produce to the Americorp team, which was given to the school food service director to be worked into the school lunch menu.

The small team of passionate volunteers do everything from planting seeds to weeding, watering, harvesting the produce, and loading up the pickup truck to deliver the harvest to the food pantry. Last season the garden produced 6,015 pounds of nutritious produce for the food pantry and their patrons.

The garden produces a wonderful variety of tomatoes, potatoes, zucchini, cucumbers, yellow squash, onions, eggplants, melons, cantaloupe, okra, pumpkins, green beans, peas, and squash, just to name a few.

Schneider started the garden on a portion of his land about five years ago after he retired, "I wanted to do something that was volunteer like but wanted it to be big enough to be meaningful. I also love gardening and produce," said Schneider.

I asked him how he connected with the ICAA food pantry. He said, "I talked to a couple of other charitable organizations, and Dawn Schliesmann with ICAA was the first one to

show a real interest, and we seemed to hit it off in our shared vision.

"I did not know how Dawn was calculating, nor honestly did I care, but one day she told me about the weight in each delivery and it caught hold. Each year we have been producing between 6,000 and 7,000 pounds of produce from our garden."

The ICAA food pantry provides the produce and other food items to between 300 and 400 families per month in Washburn County.

Many rural towns lack healthy food access, even as the food we eat is grown in rural places. There is a misconception about food deserts only being in urban areas, but a food desert is defined as parts of the country void of fresh fruit, vegetables, and other healthful whole foods, usually found in impoverished areas. This is largely due to a lack of grocery stores, farmers markets, and healthy food providers.

According to the 2015 Washburn County Community Health Assessment, 52 percent of children in the Spooner Area School District receive free or reduced breakfast and lunches. The produce at the ICAA food pantry is vital to the health of our community and its children.

I joined Lou and Dawn and the volunteer team this past February for a breakfast garden planning meeting. Lou laid out his graph paper with this year's garden plans for us to look at. He plans to expand the garden this year. He asked for suggestions on what to plant so he could place his seed order. I gave him some seed packets for sweet and hot peppers. One of the volunteers grows her personal row of okra.

All of us are very excited for the upcoming garden season.

To volunteer

If you would like to volunteer at the garden please send Lou Schneider an email: louschne@yahoo.com.



Flies parasitize monarch larva

By Deb Studley, MGv

A recent webinar sponsored by Monarch Joint Venture examined monarch parasitoids, which are tiny wasps and flies that reproduce by laying their eggs on or inside other insects. This kills the organism they feed on, which could be a monarch larva or pupa.

Tachinidae are primary parasitoids of monarch butterflies. There are 10,000 to 20,000 types of tachinidae flies, which are larger and hairier than a normal house fly.

The tachinid flies lay microscopic eggs on the host milkweed plants which the monarch larva then eat and become infected, or the flies lay their eggs directly into the larva or pupa. After the tachinids emerge from the host as larva, they fall to the ground and pupate in the soil, emerge as flies, and start the cycle all over again.

Between 1999 and 2016, the Stireman Lab at Wright State University collected and reared 20,837 monarch

larvae. In that collection, 9.8 percent parasitism was found.

Fifth instar monarch larvae are more likely to be parasitized, so if you are interested in rearing monarchs, collect smaller-sized larva and carefully wash any milkweed leaves you place in containers with the larva to eliminate passing on tachinid fly eggs which may have been laid on the milkweed leaves.

Resources

See the following resources for further information:

- Monarch Larva Monitoring Project (MLMP) – www.mlmp.org.

- MLMP Activity 3: Estimating Monarch Survival – <http://monarchlab.org/mlmp/monitoring/activities/estimating-parasitism-rates>.

- MJV FAQs about monarch predators and disease – <http://monarchjointventure.org/resources/faq>.



(Top photo) Instar sizes of monarch larvae, Photo by Karen Oberbauer, University of Minnesota Monarch Lab **(Middle)** Tachinid fly larva emerging from a monarch larva. **(Bottom)** Tachinid fly, Photo by David Capaert, Bugworld.org.

What can be done to prevent bitter cucumbers?

Printed with permission from Richard Jauron, Department of Horticulture, Iowa State University Extension

Bitterness in cucumbers is caused by the compounds cucurbitacin B and cucurbitacin C. The cucurbitacins are normally found in the leaves, stems, and roots of the cucumber plant. The cucurbitacins spread from the vegetative parts of the plant into the cucum-

ber fruit when the plants are under stress. Hot, dry conditions are usually responsible for bitterness in cucumbers in Iowa.

Bitterness does not accumulate uniformly in the cucumber fruit. The cucurbitacins are usually concentrated at the stem end of the fruit and just under the skin of the cucumber. Bitter cucumbers can sometimes be sal-

vaged by cutting off the stem end and peeling the remainder of the fruit.

Cucumber varieties differ in their tendency to be bitter. Varieties that usually experience few problems with bitter fruit include Sweet Slice, Sweet Success, and Marketmore 76.

Watering cucumber plants once a week during hot, dry weather may also be helpful.

Visit us on the web!

This newsletter and other useful information are online at:

<http://spooner.ars.wisc.edu/>
<http://www.northcountrymgv.org/>
<https://www.facebook.com/spoonerag>

Master Gardener Profile: Donna Amidon

By Donna Amidon, MGV

I am a fairly new Master Gardener Volunteer and am still in the process of becoming more familiar with north-western Wisconsin. So I feel some trepidation as I look forward to becoming president of the North Country Master Gardener Volunteer Association next year.

I was certified in the fall of 2015 and have had a family cabin near Webster for the past 15 or so years. But in the fall of 2009 I retired from being a Pediatric Nurse Practitioner and a career in the Twin Cities so I started spending more and more time at the cabin.

When we built the cabin in 2001 I tried to get wildflowers to grow, but the weeds quickly took over. So I hired Kym Christopherson to help me get a “real” garden going and maintain it while I was still only coming up on weekends. I learned about how new gardens grow in the pattern of sleep in year one, creep in year two, and leap in year three.

Gardening in sandy soil and in Zone 3 is a bit different than gardening in southern Minnesota with its rich black fertile soil and Zones 4 or 5. I needed to learn some new ways of gardening, and I was ready for a new challenge after retiring. I joined Northwoods Garden Club whose members live mostly around Voyager Village. I was inspired by Katie Childs in that club and learned she was an MGV. She encouraged me to



take the MGV training a few years later and get involved in some of the NCMGVA projects and events.

I have enjoyed the work in the research gardens at the agriculture station, worked with some children's projects, and helped with the Meet Me in the Garden events and also with the annual plant sale. In addition, I started working with a few other Master Gardeners planting and maintaining the gardens at Fort Folle Avoine.

On July 1, 2011, we were hit by the “storm of the century” with straight-line winds taking down nearly the entire forest of over 200 acres around

our lake cabin along with thousands of acres of trees in Burnett County. This changed my gardening practices as well. My shade gardens became full sun gardens so I had to move my hostas to the north side of our cabin and hope for the best with the other shade-loving plants. But the good news was that I could finally have a big vegetable garden and raspberry patch with all that sun.

After the land was cleared of much of the debris, we planted nearly a thousand trees, and I started trying to get native wildflowers growing again. I prepared the soil better this time, and after a few years the bluestem grasses and wild drought-tolerant native flowers finally started thriving. I just had to keep the invasive spotted knapweed and wild blackberries away.

I have learned that gardening takes great patience. Through my MGV training and ongoing work with other MGVs I have learned that not using pesticides or herbicides helps make my gardens and land more pollinator friendly ... and a bit more “native” in appearance. I have come to tolerate grass in my garden and learned to recognize that beneficial insects can help control the harmful ones. And finally, I have learned to live with deer and other critters occasionally helping themselves to what is growing on our land and in my gardens.

