



Newsletter August 2023

Bring on the Harvest

Now that most of the seeds are planted, we are turning our attention to nurturing our plants and reaping the harvest. And fighting the Japanese Beetles that want to eat everything!

For more information on harvesting, storing and safe food processing for preserving your harvest into winter, you can go to [UW Extension Learning Store](#) and explore the variety of information available.

For more information on dealing with Japanese Beetles check out UW Extension's [Japanese Beetle Article](#) and their [Fact Sheet](#). Since I have chickens, my favorite way to deal with them is pick them off my plants into an ice cream bucket half filled with water, and when I'm done I dump the whole thing in my chicken run for the girls to eat. If the beetles are going to eat my plants then they can at least feed my chickens! I find that in the morning and during the day, the beetles will try to fly away from my hand, while in the evening they roll off the plant to the ground.

I also found out that brown bats like to eat Japanese Beetles, so installing a bat house to entice a bat helper to your garden is another option. This [article](#) from Architectural Digest explains the why and how.

Seed Steward Training

Our first two training sessions held in the Children's Edible Garden at the Central Library were a success despite the threatening weather. We are so excited to see what our seed stewards grow out and bring back to share for next year!

Our next training sessions are:

Session 3 – Aging and Disability Resource Center, 300 S. Adams Street, Green Bay on Saturday, August 5 @ 10:00 am

Session 4 – YMCA West, 601 Cardinal Ln, Green Bay on Tuesday, August 15 @ 6:30 pm

One area that I would like to cover a little more is how/when to use blossom bags. These bags are used to cover the flower *before* it opens to prevent cross pollination when isolation distance isn't an option. When referencing the Seed Savers Exchange [Crop-Specific Seed Saving guide](#), it talks about the isolation distance you need for varietal purity (how far apart different varieties of the species need to be to ensure they can't cross pollinate). Some things require very little distance and others are over half a mile! Those of us on small properties or with neighbors therefore cannot always use isolation distance. Instead, we can use blossom bags.

For plants like tomato, pepper, beans and peas, the flowers self pollinate. So you can put a blossom bag over the flower buds before they open and leave it on until the fruit is developing.

For plants like zucchini and pumpkin, the plant has male and female flowers, and the pollen from the male can fertilize the female on the same plant. In this case, you can cover an unopened female flower with a bag and an unopened male flower with a bag. The female flower has a tiny fruit/bump under the petals, the male does not (see pictures below). Once the flowers open, you take the bags off and dust the pollen from the male on the female flower, and then re-bag the female flower to prevent any other pollen from reaching it. Once the fruit is forming and the flower is dying, you can remove the bag.



For plants like broccoli, which have both male and female flowers but are self-incompatible (the pollen from the male part can't fertilize the female on the same plant), you need to bag 2-6 separate plants and use them to cross pollinate each other. This can be very tricky to do. Another option is to use a row cover or screened cage to cover a section of plants you want to let go to seed. You only remove the covering while you are hand pollinating and then re-cover, until the flowers wilt.

Whichever method you use, remember to label your fruits or seed pods that you are saving for seed. Once the fruit or seed pod is forming, you no longer need to protect against unwanted cross pollination.

Calendar of Local Garden Related Events

August 1, 12pm - 3pm (free)

[Plant Health Monitoring Workshop](#)

Green Bay Botanical Gardens

August 1, 6:30pm - 7:30pm (free)

[Preserving the Harvest: Canning Basics](#)

Kress Family Branch- DePere Library

August 5, 8am - noon (free)

[Master Gardener Project Open House: ADRC](#)

300 S. Adams Street, Green Bay

August 5, 10am - 11am (free)

[Basic Seed Saving: BCSL Seed Stewards training](#)

300 S. Adams Street, Green Bay

August 7, 5:45pm - 7:45pm (free)

[Eco-Gardening: Organic Soil, Gardening and Compost](#)

Central Library

August 8, 6pm - 7:30pm (free)

[Evenings in the Library's Edible Garden](#)

Central Library

August 10, 5pm - 7pm (free)

[Master Gardener Project Open House: St. Mark's Church Gardens](#)

2066 Lawrence Dr, De Pere

August 11, 10am - 11am (free)

[Wild World of Worms: An Edible Garden Exploration](#)

Central Library

August 14, (time TBD) (\$)

[Ohe-Laku Farm Tour and Harvesting Workshop](#)

Green Bay Botanical Gardens

August 15 from 3pm - 5pm (free)

[Master Gardener Project Open House: Tank Garden](#)

Heritage Hill

August 15, 5pm – 8pm (free)
[Master Gardener Project Open House: YMCA West](#)
601 Cardinal Ln, Green Bay

August 15, 6:30pm – 7:30 pm (free)
[Basic Seed Saving: BCSL Seed Stewards training](#)
601 Cardinal Ln, Green Bay

August 15, 6pm – 7:30pm (free)
[Evenings in the Library's Edible Garden](#)
Central Library

August 17, 4:30pm – 6pm (free)
[Master Gardener Project Open House: Mongin Garden at the STEM Center](#)
2019 Technology Way, Green Bay

August 22, 6pm – 7:30pm (free)
[Return of the Dragon Tongue Beans: A One Seed, One Community Celebration](#)
Central Library

August 22, 6pm – 7:30pm (free)
[Master Gardener Project Open House: Cellcom Children's Edible Garden](#)
Central Library

August 23, 6:30pm – 8:30pm (free)
[Deciduous Tree and Shrub Diseases](#)
Virtual

August 26, 10am – 2pm (\$)
[Native Plant Sale](#)
Stone Silo Prairie Gardens

August 30, 12pm – 12:30pm (free)
[Growing Garlic in Wisconsin](#)
Virtual

September 6, 12pm – 12:30pm (free)
[From Scraps to Soil: Composting Basics](#)
Virtual

September 13, 12pm – 12:30pm (free)
[Soil Testing – Why, When, and How](#)
Virtual

September 27, 6:30 pm – 8:30pm (free)
[The Bad and the Ugly: Ten Plant Diseases Not to Compost](#)
Virtual

September 30, 9am - 4pm (free)
[Fall Family Festival](#)
Green Bay Botanical Gardens

Seed Saving Tips

It's roguing time! No, it's not a new game out on the market, but it can be lots of fun. Roguing is removing undesirable plants that are underperforming or inferior in your seed crop. This would include plants that bolt (go to flowering stage) early, plants that lack vigor, color, or size, or plants that have disease or other unacceptable traits.

This becomes important when you are saving seeds from your crops. By roguing, you help keep the desired genetic identity of the seeds for subsequent generations. With undesirable plants removed, you lessen the risk of saving seeds that are not true-to-type.

For some people this can be considered a fun activity, but for others, it can be a painful experience. It may not be easy pulling out plants you have spent weeks caring for with the hopes they make it to maturity. Once I realized it is much like minimizing in your house, the experience of roguing has become more liberating. Two tomato plants were reluctantly removed from my garden last week, but knowing I did the right thing to protect seed integrity left me feeling satisfied.

Your assignment this month is to walk through your garden and apply the concept of roguing. Yes, you can make it a fun family event. Tell your kids it is a new game. Let us work together to make sure we protect the desired genetic identity of the seeds we gather.

Submitted by Peggy, NEW Master Gardener

One Seed, One Community

The air is getting heavy and the children are getting restless. These are sure signs it's getting close to harvesting time for your Dragon Tongue Beans. But how do you really know when to harvest your beans?

Looking for clues:

- ★ Are they ready if they are large and bumpy? Large and bumpy is good, but they also need to change color.
- ★ Are they ready if they are the color brown? Brown is good, but they need to be dry.
- ★ Are they ready when they feel dry? Dry is good, but the beans should be somewhat loose in the pod.

Observe your beans, and when they are large, bumpy, brown and dry it is time to harvest! Return the bean pods to the Brown County Central Library anytime after August 1, or bring them to the “Return of the Dragon Tongue Bean Celebration” being held on August 22 at the Brown County Central Library.

These bean seeds were planted in a window box. Tagging tiny beans is challenging. You may want to wait until the beans are a few inches long, and then tag them.



Dragon Tongue Beans Labeled ✓

Largest 3 beans tagged on each plant ✓

Row cover handy for when the Japanese Beetles discover these plants. ✓

Submitted by Peggy, NEW Master Gardener

Quick Turn-around Plants

August 1 is approximately 75 days before the first expected frost in Zone 5A. There are still plenty of seeds you can plant and expect a harvest from before the first frost, including dragon tongue beans, basil, Golden Acre cabbage, carrots, cilantro, chard, collard greens, mustard greens, kale, lettuce, peas, radish and spinach. Remember some things on this list are cold hardy and will survive the first few light frosts of the season. Plants that are not cold hardy can be covered using an old sheet or row cover to help get it through a frosty night or two.

Submitted by Melissa, NEW Master Gardener

Living Soil and Planning Your No-Till Garden

Last month we talked about path management as discussed in Jesse Frost's book "The Living Soil Handbook". This month I would like to tackle a pretty extensive subject; fertility management. Specifically, fertility management from the perspective of stewarding living soil. Most of us are familiar with the fertility management practice of adding fertilizers to increase the amount of nutrients in the soil. Fertilizers are often comprised of individual components (such as nitrogen or potassium) measured out by weight, and these individual components break down in the soil so they are available for the plant to take. However, in a garden focused on living soil the plants are provided nutrients by the microbes, so the amendments we add and practices we implement are to help support the community of microbes and not necessarily the plant directly.

Fun fact: microbes not only feed plants by releasing compounds into the soil, but there is also a phenomenon called the rhizophagy cycle, in which microbes will actually enter into the plant roots! In this process, the bacteria enter the plant roots and are kept safe from predators, and in exchange they release nutrients directly into the plant root cells. The plant will then let the bacteria back out into the soil for it to collect more, and then take the bacteria back into its roots again. This has been described as the plant "farming" the microbes! According to an [article](#) from [No-Till Farmer](#), "We can speculate that in non-domesticated crops, in wild plants that are growing out in the forests and meadows and so forth, upwards of 95% of a plant's nutritional requirements are coming from bacterial cells, rather than from simple ions from the soil solution." This is very new science and we are still learning about it, but it is another way that microbes in soil help support plant life.

The first factor of fertility to consider is consistent moisture. I think we all understand that plants need water to survive. So do soil bacteria and other microbes in a living soil. Drought or inconsistent watering can lead to soil bacteria death and too much water can lead to anaerobic bacteria (often pathogenic and often stinky!) Water is needed for photosynthesis, which is how the plants produce the carbohydrates that help provide energy for themselves and the microbes around them. Municipal water is often treated with chemicals to kill microbes, so if you are having to depend on it to water your gardens those chemicals may negatively affect your soil microbes. Using rain water is a great alternative, or using water that has sat uncovered for a day (to allow the chlorine to evaporate).

Soil structure and soil permeability aren't always considered when talking about fertility, but they are important factors that affect the transport of water and gasses in the soil which are needed by plants and microbes. The soil structure is the arrangement of the solid parts of the soil and the air spaces (pore spaces) around them. Soil permeability talks about the performance of that structure, specifically how quickly liquid and gasses move through the soil. Soil structure and permeability can be improved or maintained by not tilling, not walking/driving on it, keeping it mulched or planted, and increasing organic matter (including microbes).

Soil is mostly made up of inorganic materials; air, water and minerals. When managing the fertility, you want to have between 5-10% soil organic matter, which can be determined by [soil testing](#). According to a University of Minnesota extension [article](#), native soils in the Midwest average between 4-7% organic matter if they have been unfarmed and unaltered. Soil organic matter can be increased by keeping living plant roots in the soil, leaving plant roots in the soil after the crop is terminated, and adding compost or other mulches. Soil microbes, when they die, also contribute to the level of organic matter.

Traditional agriculture focuses a lot on feeding plants directly, but in a living soil it is the microbes who feed the plants. Therefore, as stewards of the living soil we are essentially farmers of microbial life. If we are doing our job and providing them with everything they need, they will in turn provide our plants with what they need.

Submitted by Melissa, NEW Master Gardener

Featured Local Organization: Paul's Pantry

Now that the harvest is starting to become abundant, we would like to remind you of all the food pantries in the area that accept donations of fresh produce through the [Planting for a Purpose](#) program. One of those programs is [Paul's Pantry](#), who accepts food donations Monday through Friday, 7am - 2pm and Saturday from 7am - 1pm at 520 Leo Frigo Way, Green Bay. Their food distribution hours are Monday, Tuesday, Wednesday & Friday: 9 am - 1 and Saturday: 9:00 am - noon. Any food that is donated and not taken by pantry recipients is given to local livestock farmers, so nothing they receive goes to waste!

Submitted by Melissa, NEW Master Gardener

Plant Profile: Lanceleaf coreopsis

Lanceleaf coreopsis (*Coreopsis lanceolata*) is a native flowering plant that is hardy from zone 3-9. Also known as tickseed, it blooms in late spring to early summer with 1-2 inch diameter yellow flowers. It is easily grown from seed and can be started in spring or fall, although the seeds do tend to germinate better if they go through a period of vernalization (cold exposure). The plant likes full sun and dry sandy soil, although it can handle moderate moisture. It will self seed and also spread by rhizomes, forming clumps of cheerful flowers. Because its roots do not go very deep, it can be planted in containers as long as they are very well draining.



The flowers feed bees, butterflies, wasps, beetles and moths. After flowering, birds such as cardinals, chickadees, goldfinches and sparrows enjoy eating the seeds from coreopsis. Leaving the seed heads on can help entice these visitors to your garden and provide a food source during the scarce winter months.

We are hoping to offer this native plant in next year's seed list. If you have some growing please consider saving the seeds for our library!

Sources:

<http://www.newmoonnursery.com/plant/Coreopsis-lanceolata>

https://www.fs.usda.gov/wildflowers/plant-of-the-week/coreopsis_lanceolata.shtml

Submitted by Melissa, NEW Master Gardener

Featured Recipe

Ratatouille

INGREDIENTS

Sauce base:

- 1 15 ounce can tomato purée
- 3 cloves of garlic, pressed
- 1 teaspoon Herbes de Provence
- 1 Tablespoon balsamic vinegar



Slice:

- 2 yellow or red onions
- 4-5 medium Roma tomatoes
- 3-4 medium zuchinni
- 2 medium eggplant
- 1 yellow bell pepper, seeds and spines removed

1 green bell pepper, seeds and spines removed

1-2 Tablespoons olive oil

1 teaspoon dried thyme

1 teaspoon fresh dill (or 1/4 teaspoon dried dill)

2 Tablespoons fresh oregano (or 1 teaspoon dried)

2 Tablespoons fresh basil, chopped (or 1 teaspoon dried)

Salt and pepper

4 springs of thyme

2 bay leaves

Instructions:

1. Preheat oven to 375. Brush circular pan (or 9x13 glass pan) with oil. Mix tomato purée, garlic, herbs, and vinegar—if you have time, cook for 20 minutes to meld flavors. Pour into bottom of oiled pan.
2. Slice all veggies (1/4 inch or thinner) and toss with olive oil and season with herbs. You will likely need to cut eggplant slices in 1/2 or 1/4 rounds to make similar in size to other veggie slices.
3. Starting with outside perimeter of pan and, working toward center, layer alternating colors of vegetables. Continue to center of pan, tipping veggie slices slightly to be able to see all the colors!
4. Put sprigs of thyme and bay leaves on top. Cover with parchment paper, cut to fit inside pan, and bake for 30 minutes. Remove parchment and bake for another 5-10 minutes.
5. Remove bay leaves and thyme sprigs prior to serving. Serve with a big spoon and dig deep for the sauce!

Submitted by Terri, NEW Master Gardener

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Northeastern Wisconsin Master Gardeners
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