



A word about Minnehaha Master Gardeners: We are volunteers trained through the South Dakota State University Extension [Master Gardener Program](#). The Minnehaha Master Gardeners mission is to provide current, research-based, consumer horticulture information and education to South Dakotans through Master Gardener projects and services. For more information on becoming a master gardener, visit [SDSU Extension Master gardener volunteer program](#)

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## *What's inside*

<b>In the Herb Garden</b>	<b>1</b>
<b>How to Water Tomatoes</b>	<b>1</b>
<b>“A Weed is a flower growing in the wrong place.” George Washington Carver</b>	<b>2</b>
<b>Masters in the Garden - June 18th, 2024</b>	<b>4</b>
<b>What? Parsley is a Biennial?</b>	<b>6</b>
<b>Weed Suppression</b>	<b>7</b>

## **In the Herb Garden**

*By Priscilla Jurkovich, Master Gardener*

Sweet Woodruff (*Galium odorata*) is a perennial herb in the family of flowering plants(Rubiaceae). They have white flowers that bloom in early spring in zones 4-9.

Bedstraw is a common name for sweet woodruff. Sweet woodruff prefers partial to full shade with moist soils. Sweet woodruff has squarish stems that grow to 6-12 inches and spread by rhizomes. The bright green, narrow and roughly textured leaves are arranged in whorls around the stems. May direct sow in spring but slow to germinate. Cold stratification in the soil may speed germination. Easily propagated by rhizomes.



<https://hort.extension.wisc.edu/articles/sweet-woodruff-galium-odorata/>

The fresh plant has little scent until it is dried. Once dried, the aroma has been compared to hay, almonds and vanilla. The dried leaves and flowers have been used for potpourri, household insect repellent or in closets to protect from moth damage. A tea can be made from the leaves. A tan or gray-green dye has been made from the leaves and stems. A red dye is produced from the roots.

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## How to Water Tomatoes

*By Carla Goetsch, Master Gardener*

**Know Your Soil and Location:** Sandy soil may have to be watered every 3-4 days, whereas clay soils may only need watering once a week. Raised beds tend to dry out more quickly than tomatoes planted in the ground. Raised beds may need watering every 2-3 days. Plants in pots may need daily watering. The best way to determine moisture is to dig down a couple inches below the surface to check for moisture. The warmer the temperature, the quicker the soil dries out.

**Water based on Growth Stage:** Young transplants need to be kept moist until the roots can develop. Mature plants need about an inch of water per week unless they are planted in a location that dries out more quickly. Fruiting plants are the most sensitive and need watering more frequently. Overwatering can cause the fruit to grow too quickly causing the tomatoes to split/crack. Underwatering can prevent the plant from transporting the calcium from the soil to the fruit causing blossom end rot. Most of the time there is enough calcium in the soil but not enough to transport. Too much water or too much fertilizer can cause the plant to grow too quickly producing the deficiency.

The good news is just because some of the early fruit have blossom end rot, if the problem is corrected, later tomatoes will be fine.



**Keeping Soil Moisture Consistent:** Mulch, mulch, mulch! A 2” layer of organic mulch insulates the soil, preventing big temperature swings. Mulching helps to keep water stealing weeds at bay and slows down soil moisture evaporation. Shredded bark mulch and weed-free grass clippings are good choices.

**Tips for Watering:** Deliver the water to the base of the plant to reduce bacterial and fungal diseases on the leaves. It is better to water more slowly, so soaker hoses are the ideal. It is better to soak the top 10” of soil and water less frequently. Watering in the morning helps to reduce the chance of moisture related diseases.

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“A Weed is a flower growing in the wrong place.” George Washington Carver

*By B. Fredrickson, Intern*

We write articles about the vegetables, flowers, landscaping and all the other intricacies of Gardening. The weed is part of gardening, often frowned on, pulled, sprayed and destroyed to the best of our abilities. A simple search will produce various responses “what is the best weed killer” versus “A weed? A plant whose virtues have not yet been discovered. Ralph Waldo Emerson”.

To me, this sounds like a judgment call. What is your goal? Do you wish to remove all plants that are not intended? Or, are you a more relaxed gardener that prefers the biodiversity that un-intended plant growth can bring? Regardless, there are a few plants that straddle the line between weed and flower.

### **Bamboo**



This can be invasive depending on the variety that is planted. There are 1000 known species of bamboo and maybe as many as 1600 in the wild. There are clumping bamboo, running bamboo, Japanese bamboo all of which have different scientific names and many of them considered invasive depending on the country. In the United Kingdom, a person can be heavily fined for introducing the Japanese Bamboo to a habitat. With that being said, before you add this beautiful plant to your garden, speak with a reputable gardening center and know what you are adding. Don't just accept one from your neighbor, unless they know what they are talking about.

### **Garlic Chives, Chinese Chives – *Allium tuberosum***



Significantly different from regular chives, it has a flat solid stem versus the hollow stem that a traditional onion chive grows. Growing anywhere from 1.5 to 2 feet tall with attractive white umbels it will draw many butterflies, bees and other pollinators with its attractive scent. At the end of the growing season, you can cut and dry the flowers for arrangements. It can be used in cooking as part of a salad, egg dishes or stew. I've used it to make a Garlic Chive Soup that was quite tasty. Here's the tricky bit, once it goes to seed it can spread like crazy. So, cut those attractive flowers before they go to seed or you will be pulling these chives from your garden for years to come. [Wisconsin Horticulture](#)

### **Spearmint – Mint Family**



Mint, often used as a flavoring agent, is a very aggressive herb. Its roots can grow three feet deep. It spreads by both root and/or seed depending on the variety. Once established, it takes perseverance to eliminate and yet who doesn't enjoy a nice cup of mint tea? Think carefully before you introduce this plant to your herb bed because without care, it can take over.

### **Scottish Thistle**



Everyone would raise their hand that this is a weed. However, this weed is a food source for many animals, prairie dogs, pollinators and birds. It is spread by seed. It has been used in medicine but so far, scientific evidence has not backed this use. It has a lovely purple flower that blooms from July through October. That flower may be pretty but its charm is significantly less than desirable when you step on the thorny leaves. In several states, the Scottish Thistle and several of its relatives are considered a noxious weed. The

best place to grow this plant is in the natural habitat, aka uncultivated area although even there it can overwhelm the natural flora.

For a very comprehensive Invasive Species List go to [USDA United States Department of Agriculture Plant Database](https://www.usda.gov/aphis/nppl/plant-database/)

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## Masters in the Garden - June 18<sup>th</sup>, 2024

*brought to you by the Minnehaha Master Gardeners*

*By B. Fredrickson, Intern*

What a great evening for a walk-through Sue's garden in Sioux Falls, SD. Although overcast, the threatening thunderstorm held off as the comfortable 70° made a stroll along the flagstone paths an enjoyable experience. With approximately 48 visitors, at times the paths were ever so slightly congested but no one minded as the many plants and garden art entertained the senses with sight, sound and scent.



Sue began working on her garden with the purchase of her home in 2002. She has spent 22 years planning, planting and laying the bones of her garden foundation. With hard work she brought the 7 tons of flagstones that compose her pathways and with help, laid them down. In the beginning it took 150 bags of wood mulch, although today it's only about 15 bags a year, to cover bare spots that may have decomposed through time.

There is quite the collection of metal watering cans lining a walkway close to the entrance, which she paints in various colors. Bird baths were placed as focus points with rocks as resting places for butterflies. Sue constructed these birdbaths with items mined from rummage sales. It's a great way to repurpose an item, saving it from the landfill. When asked what her favorite plant was, her response, "They are all her favorites". Sue is particularly pleased with the Yellow Foxglove - *Digitalis grandiflora*, pictured in the photo.

As the guests took their leave, a few questions came to mind. "What was that vine that covered the fence?" Virginia

creeper – *Parthenocissus quinquefolia*, think carefully before introducing this to your garden. It can be very invasive unless you repeatedly cut it back every year and possibly remove runners/shoots.

“What are the lovely purple flowers under the tree over there?” Clustered Bell Flower – *Campanula glomerata*; it spreads easily through self-seeding and prefers partial shade to full sun locations.

There is so much to see and comment on that it requires a second or possibly a third visit. Sue has invited visitors to drop by but please stay on the paths and be respectful. Watch for a “Masters in the Garden” on Facebook in July.



*b. Birdbath constructed by Sue*

*c. Collection of Metal Watering Cans*

*d. Clustered Bellflower - Campanula glomerata*

*e. Virginia Creeper - Parthenocissus quinquefolia*

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## What? Parsley is a Biennial?

*By Carla Goetsch, Master Gardener*

The definition of a biennial plant is that they use two years to complete their life cycle. The first year they produce the root, stems, leaves, and store food for the next year. They bear flowers and seed in the second year before they die. Biennials need to go

through a process called vernalization which means they require a cold period before producing the flowers/seed like seen in the second year. Common flowers that are biennials include hollyhocks, foxglove, pansy, black-eyed Susan, Sweet William, and Queen Anne's Lace. Biennial plants are excellent self-seeders. Often, you may not even notice last year's second year plants dying out if there is always a new generation of first year plants coming up and the second-year plants blooming and producing seeds.

The awareness of biennial flowers to long-time gardeners may not come as a surprise and the second-year flowering plants are preferred to the first-year flowers. However, second year herbs are not as beneficial. Parsley, being a biennial, came as a surprise to this gardener. I previously believed parsley to be an annual plant, so I was pleasantly surprised to see mine coming back this spring. Initially chalking it up to a mild winter, but then the excitement quickly became disappointment. The parsley has very few useful leaves, but it did produce a yellow, seed head like dill. So, what does a gardener do with second year parsley? You can let them go to seed in order to collect them, with the hope to replant or, for a successful self-seeding. Or, you can try keeping the flowering stock pruned back to get as many leaves as possible. More popular, in countries, such as Holland and Germany, use the parsley root like you would use carrots in soups and stews.

Other biennial herbs include caraway, clary, watercress, stevia, sage and Angelica.

First year plant



Second year plant that has bolted



# Weed Suppression

*By Kat Murphy, Master Gardener*

With all the water this year, the weeds are growing great! I was fortunate enough to be in conversation with Perry Johnson, Master Gardener, of the Brookings Master Gardeners discussing how he developed a weed suppression demonstration garden.



The Brookings Master Gardeners have six plots given to them by the City within the Douglas Chittick Community Gardens. They host teaching events several times each summer. Mr. Johnson's plot specializes in testing the effectiveness of different weed suppression techniques! He graciously sent me the results of his efforts.

Here is an extract from his work.

“Concept: Anything that will block sunlight will suppress weed growth.”

The demonstration plot focuses on sun blocking options to control weeds in the garden. The key to this method is to apply in the Spring. Most weed suppression labor should occur during the garden prep and planting. Waiting till weeds emerge is too late for best results.



## **Landscape Fabric**

Advantages: highly durable; lasts many years. It is semi-permeable to water. It limits evaporation, warms the soil, and controls erosion. Excellent for use in transplanting bedding plants, seedlings are planted in small cuts in the fabric. Fruit stays clean and rotting is reduced.



Disadvantages: the fabric can be expensive. Initial labor is intensive when trenching it into the soil, the fabric must be dug in or pinned.



#### **4.0 ML Black Plastic Film**

Advantages: It is inexpensive and readily available. It limits evaporation and can be used for multiple years. Requires less watering. Fruit on the plastic film stays clean and damage caused by rotting is reduced.

Disadvantages: It tears very easily. It is *not* water permeable, requiring a soaker hose or manual watering from below the plastic. It is not biodegradable.



#### **Cloth Fabric**

Advantages: It is very water permeable, low cost, easy to work with and is common in most hardware stores.

Disadvantages: It does tear easily. It can break down quickly in sunlight if not covered with grass or soil. It appears to have a higher failure rate than other methods of weed suppression. Liquid fertilizers and sunlight can break down the integrity of the cloth.

#### **Cardboard, paper or grass clippings**



Advantages: All are inexpensive and easy to obtain materials. Can reduce evaporation of water. Can be watered by hose, soaker hose or sprinkler. They are biodegradable.

Clippings should be added in layers that are 2” or more deep. Paper is useful for seed beds as some vegetables seedlings can push through the wet paper.

Disadvantages: Clippings can become moldy and can cause problems with soft ground level fruits such as strawberries, tomatoes, etc. Also, clippings can have weed seeds in them. “Paper may not last all summer, so firmer choices of paper should be considered.”

Thank you Perry!



## DID YOU KNOW...that you can grow tomatoes on a string?

### Part 1

*By: Debi Ulrey-Crosby, Master Gardener*

Yes, you can grow them literally “on a string”. My son, Brett, has been gardening vicariously through me, encouraging me to try this method for a couple years now. There are many types or methods of trellising tomatoes. Basketweave, hanging string, and lower-n-lean are just a few of the different ways to trellis tomatoes. Basket weaving methods (also called Florida Weave) are best suited for the bushier types of tomatoes like determinants and semi-determinate varieties, whereas the hanging trellises are best for the indeterminate varieties. So, after reviewing the various methods, and

knowing that we would be growing indeterminates, Brett and I settled on using the string method, with the caveat that he would help me set up the system.

You might be asking “why trellis tomatoes?”. Some of the many advantages of trellising vining crops such as tomatoes, peppers, cucumbers and some squashes are:

- Growing the vines on a trellis will keep them out of pathways.
- Trellising makes fruit easier to find.
- Trellised vines can be grown at a higher density than vines that are sprawled, or caged since they can make use of the vertical space above the plant, instead of growing into each other.
- Keeping vines off the ground decreases exposure to soilborne pathogens.
- Airflow is better around trellised plants which helps keep the canopy drier and less vulnerable to fungal diseases.

We choose to make two rows about 10ft. long and 3ft. apart, using the following equipment:

- 4 7 ft T posts
- 2 10ft. electrical conduit pieces
- 4 PVC elbow pieces
- 1 roll of tomato string
- 1 bag of tomato clips
- 1 stake per tomato plant to attach string near the ground (I used bamboo stakes)

Equipment can be purchased from most hardware/big box home improvement stores (Menard, Home Depot, etc.). I purchased the tomato clips from Amazon and the other items that I didn't have were purchased locally.

After setting up the trellis frame, I planted each tomato plant about 11” apart. String is attached to the top (conduit) pole and then attached to the bamboo stake close to each tomato stem. I attached a tomato clip to each tomato plant's stem once the plant had grown enough to use the first clip. As the tomatoes grow, I will remove the lower leaves to prevent any disease issues, remove suckers to encourage more fruit development, and add additional clips as the plants grow taller. The clips have a small section that holds onto the string so that the clip is stationary on the string and the tomato stem is free to move within the circle of the clip.

Below are photos of how things look now and how the frame is set up. My plants are still small but as they grow, I will post another newsletter article to update you on the progress of this trial so stay tuned for Part 2.



PVC elbow, conduit, T post & green string



Two rows, note clover ground cover



Two tomato clips

#### References:

1. Josh Sattin Farming – A Trellis To Make You Jealous  
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3. [Johnnyseeds.com/growers-library/methods-tools-supplies/pruning-trellis/trellising-tomatoes.html](https://johnnyseeds.com/growers-library/methods-tools-supplies/pruning-trellis/trellising-tomatoes.html)

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Do you have comments, questions, or topic ideas that you would like us to explore? Email us at [MinnehahaMGnews@gmail.com](mailto:MinnehahaMGnews@gmail.com). We would love to hear from you!

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*All articles are researched and written by Minnehaha County Master Gardeners and Interns. Thank you to all, for sharing your knowledge!*