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Cover Artwork by Pam Conklin

A word about Minnehaha County Master Gardeners: We are volunteers trained through the South Dakota State University Extension Master Gardener Program. For more information on becoming a master gardener, visit SDSU Extension Master gardener volunteer program

Be sure to stay in touch with all of Minnehaha County Master Gardeners' news: **follow us on FaceBook, visit our website,** or **email us.**

What's inside

In the Herb Garden

By Priscilla Jurkovich, Master Gardener

The herb section will highlight an herb that can be grown in the South Dakota region.

Lovage (*Levisticum officinale*) is a hardy perennial in zone 4 in the Apiaceae or Umbelliferae (carrot) family that can grow 3-6 feet tall with dark green glossy, toothed compound leaves with a 32 inch spread that resemble those of celery. The flowers are yellow umbrella-shaped umbels in clusters common to the carrot family that bloom in July through late summer. They prefer full sun and well-drained sandy, loamy soils. Seeds can be directly sown outside after soil temperatures are 60 degrees F, or started indoors 5-6 weeks before the last frost. Seedlings require consistent moisture until they are several inches tall. The leaves and stems can be harvested anytime.

All parts of the plant can be used to flavor any recipe that calls for parsley or celery. The stems are hollow and can be used as a straw. Well known in reducing inflammation and pain associated with urinary tract infections, promotes digestive health and also used as an expectorant in respiratory problems.

Bug Bites

by Pam Conklin, Master Gardener

Insects! They are tiny, creepy-crawly, digging, biting, disgusting, yet, beneficial; without them, life as we know it would not exist.

Mosquito collecting nectar

Small and deadly, this is the story of the mosquito. These tiny insects have been on earth for millions of years. Of the 3500, or so species, only about 43 are found in South Dakota. Globally, mosquitoes are viewed as the number one vector predator of humans. Some have actually evolved to prey only on humans. These tiny creatures spread malaria, dengue, Zika, and other deadly viruses. But, in South Dakota the most notable vectoring virus that threatens us is West Nile, which is spread by Aedes vexans and Culex tarsalis mosquitoes (the latter being the biggest threat).

Sioux Falls sprays for mosquitoes starting sometime in June and continues to do so throughout the summer. Their spraying schedule is based on the population of virus carrying mosquitoes found in and around town. Logic may suggest that eradicating these pests may be in the best interest of humans. They are, after all, blood thirsty, disease spreading creatures weighing only 2.5 milligrams that cause pain, swelling and itching at the bite site, but in some cases, they also cause death to humans who are a million times their size.

Before we destroy them, let's think about the purpose mosquitoes serve in the ecosystem. They do not go unchallenged. Their larva and adult forms are a main food source for some fish and aquatic animals, like dragonflies, turtles, not to mention, the adults are food to bats and many birds, including hummingbirds. Oh, and spiders like them too! We don't usually list mosquitoes when we think of pollinators, but that is one of their ecological contributions. In fact, male mosquitoes only eat nectar as their source of energy. Without mosquitoes we would no longer see some species of wild orchids that depend primarily on mosquitoes for pollination.

If you're thinking of spraying your lawn for insects, even mosquitoes, consider this: Insecticides are not selective. When we spray, we kill everything that comes in contact with the insecticide. We also do potential harm to whatever eats the affected insects. This includes other insects, birds, bats, and possibly decomposers.
There are other ways we can protect ourselves from these tiny bitters. Individual sprays that are applied directly on our skin or clothing. It also helps to walk around the yard and clean up areas with overgrown weeds and remove items, or debris that collect water and just sit. Such environments become breeding grounds for mosquitoes. If you have birdbaths and other water features, either provide aeration or clean them daily, providing fresh water to prevent eggs from hatching and larvae from maturing. Consider adding plantings of thyme, especially creeping thyme (Thymus serpyllum), lemon grass, lemon balm, lemon verbena, lavender, and other aromatic herbs, like mint and rosemary. These plants are an effective way to ward off mosquitoes in the lawn.

Remember, Sioux Falls does spray, so you won't need to. You can still enjoy your summer and be safe knowing that mosquitoes are most active at dusk and dawn, so covering yourself with personal insect sprays, or long sleeves, jeans and shoes when out during those times of day will help protect you. And if you still get bit, a good itch relief cream may be handy, too!

Sources:
https://www.mitchellrepublic.com/news/south-dakota/not-mosquito-free-but-close-how-20-years-of-spraying-has-changed-sioux-falls#:~:text=There%20are%2043%20different%20species%20of%20mosquitoes%20living%20in%20South%20Dakota.

https://www.mprnews.org/story/2008/06/17/westnile#

https://extension.sdstate.edu/know-your-west-nile-virus-vectors

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GREEN ONIONS

By Carla Goetsch, Master Gardener

Green onions (also called scallions) are a cool-season crop and are the perfect first crop for winter-weary gardeners who are anxious to work in the garden. Green onions are native to Asia and have been cultivated for over 2000 years.

Why grow: They are the earliest harvest- early May with production into November. Likely to become a perennial vegetable

Growing: Easiest way to start green onions is to use the green onions you purchase in the grocery store. Just save the bottom inch along with the roots. Start saving these bottoms from about mid February to about the first part of April. Then in the first week of April, plant. If you notice your green onions from last year are coming up, cut off at the soil line. These will start being available for harvest already by the beginning of May. These onions may be planted in a spot that gets some light daytime shade. The hot weather does not significantly decrease the quality of green onions.

Harvesting: It is best to just harvest the green onions as you need them, which is easy to do since they have such a long season that harvesting can be done.
Storage: If you harvest too many green onions, they may be stored in the refrigerator for up to a week. Store green onions separately from foods that test to absorb onion odors. Green onions can be frozen, but the texture does change so probably best to purchase as needed during the off season.
Preparing: Green onions are often eaten raw, but can be roasted, grilled, or sauteed. Use as a garnish in soups, salad, or dips. You can also use a food processor and combine green onions, garlic, and olive oil to make a pesto-like sauce or spread that can be added to meat or other vegetables.

Nutrition: Only 5 calories per onion. Excellent source of vitamin K, vitamin C as as well as vitamin A and folate. Green onions are part of the Allium family along with garlic and chives. Scientists have identified certain compounds in these vegetables that seem to protect against cancer.

To Mow or Not To Mow: That Is The Question

By Jason Cruse, Master Gardener

With the passage of Ordinance 23-004 by the Brookings, SD City Council, “No Mow May” came to South Dakota in force. Notes promoting the idea popped up on social media for master gardeners around the state. The idea of “No Mow May” has even been “proven” by research from Lawrence University in Appleton, WI. Until it wasn’t.

The fact is “no mow” isn’t really that good or helpful. Since the publication and dissemination of the now debunked study, “No Mow May” has been adopted by many

towns and cities, particularly in the upper Midwest. However, the study itself had many flaws and northern tier extension services are now turning their backs on “No Mow May”. (For more information on the problems with the study, see the americanexperient.org source below).

The main reason NOT to mow is that spring yard flowers (read: weeds) can attract pollinators early, which is good for pollination. However, according to a New York extension officer, bees and other pollinators communicate the existence of pollen to other pollinators. When we don’t mow in May, and attract pollinators, it may in fact harm the pollinators when they return in later months only to find that the flowers have been mowed down. Additionally, attracting pollinators by not mowing depends more on what is in your yard than on not mowing. For instance, according to the University of Wisconsin, if your yard is well cared for (no dandelions, for instance), then not mowing won’t produce any pollinating plants.

No Mow May also create multiple stress points for your lawn. According to Iowa State University, by not mowing for an entire month, you will actually encourage the growth and spread of invasive species of plants, some of which may not be valuable to pollinators. In addition, mowing more than 1/3 of grass height at a time can damage the turf in your yard, and may even kill the grass. Finally, many of our yards are not seeded with native grasses. This means that they require additional care. Ignoring them will cause a spread of “non-native plants growing unchecked.” This isn’t responsible behavior.

So, what can we do to encourage early season pollinators? First, we can adopt “Less Mow May”. The bee lab at the University of Minnesota says we should not take “No Mow May” literally. Allow low weeds (such as dandelions) to flower but not seed. The University of Minnesota extension also suggests that to begin the season, set your mower to its highest setting, say, 4”. Then, since you shouldn’t mow more than 1/3 of the grass height at a time, wait until the turf is 6” high before mowing. In combination, this practice will allow for flowering plants to grow, while not damaging the lawn.

Finally, if you aren’t as concerned about your lawn being a manicured golf fairway, consider the addition of low-grow flowering plants to your yard. The University of Wisconsin recommends Dutch white clover and creeping thyme as possible options. These will attract pollinators, not ruin your yard, and serve well to fill in bare spots. No Mow May may be done for 2023, but it will roar back in 2024. Remember—as master gardeners we use proven science to recommend plans of action. The science

of No Mow May has been disproven—but the idea of attracting pollinators lives on in "Less Mow May."

Sources
https://www.americanexperiment.org/study-used-to-justify-no-mow-may-retracted-due-to-shoddy-scholarship/ (accessed 8 June 2023)

https://apnews.com/article/gardening-no-mow-may-lawns-6aa1669b9e9bb5b5d8ea671c44d186f2 (accessed 8 June 2023)

https://hort.extension.wisc.edu/articles/whats-the-deal-with-no-mow-may/ (accessed 8 June2023)

https://hortnews.extension.iastate.edu/tips-participating-no-mow-may (accessed 8 June 2023)

https://beelab.umn.edu/no-mow-may (accessed 8 June 2023)

https://extension.umn.edu/yard-and-garden-news/what-not-mowing-may-could-mean-your-lawn (accessed 8 June 2023)

Must Grow Warm Season Vegetables

By Carla Goetsch, Master Gardener

GREEN PEPPERS
Why: Large return in produce from the investment in garden space. Very easy to preserve for year-W round use.
Growing: Bell peppers tend to grow best in warmer temperatures. The ideal temperature range for best growth is between 62 and 80 F. Bell peppers grow best when started from seeds started 8-10 weeks indoors before last frost, followed by planting outside in late spring. Set plants 18 to 24 inches apart in a row, or 14 to 18 inches apart in all directions. Set plants no deeper in the soil than they were previously in the pots to avoid rotting. Bell peppers thrive in fertile and moist soil, so keep the soil moist while the plants are in bloom and producing peppers. About 1 to 1½ inches of water per week is sufficient.

Harvesting: Harvest promptly when fruits reach the desired size and color. You should cut the pepper off the vine with a knife as opposed to ripping it off. This prevents any further damage to the plant or other peppers that are growing.
Storing: Keep bell peppers in the refrigerator, and for optimal freshness, use within a week. If bell peppers have been cut, keep them refrigerated and store in an airtight container or plastic wrap.. Bell peppers can be eaten fresh, steamed, grilled, roasted or stuffed.
Freezing: Bell peppers are easy to freeze. Begin by rinsing and drying peppers thoroughly to help prevent freezer burn. Cut peppers as desired, removing all seeds. Spread the pepper slices on a baking sheet in a single layer and freeze them. This will prevent the peppers from freezing together in clumps. Transfer the frozen peppers to freezer bags. Use heavy-duty freezer bags and eliminate as much air as possible from the bags to help prevent any freezer burn.

CUCUMBERS
Why: Large return on investment of space and effort. Low calorie snack or PICKLES!
Growing: Sow seeds outdoors in late May when the soil is warm and after the danger of frost has passed. Sow seeds 4 to 6 inches apart, ½ inch deep, in rows 5 to 6 feet apart. Thin plants to stand 12 inches apart. An alternate method is to sow seeds in hills. Sow four to five seeds per hill, spacing hills 3 to 5 feet apart in rows 4 to 5 feet apart. Thin to two plants per hill.
Harvesting: Cucumbers should be picked often to promote a continuous yield. Avoid harvesting while the leaves are wet to prevent the spread of plant diseases.
Storing: Cucumbers are best stored in humid, 55 F areas such as a cool basement room. They are fresh for a week in the refrigerator.
Preserving: Preserve cucumbers by pickling. Canning cucumbers is best done within 24 hours of picking them. Be sure to rinse the cucumbers thoroughly. Adding vinegar makes cucumbers acidic for safe pickling and provides flavor. Use 1- to 1½-inch cucumbers for making gherkin pickles, and 4-inch cucumbers for dills.

TOMATOES
Why: Very large return on investment. Multiple uses for both fresh and preserved.
Growing: Harden off transplants by moving to more sun daily for about a week. Sow transplants outdoors in late May when the soil is warm and unlikely to be < 50 degrees. Dig a hole and amend soil with a tomato fertilizer or bone meal. Plant transplants deeper than they are in the garden container. Bury a large percentage of the stem. May also take off bottom leaves to allow for deeper planting. Space 2-3 feet apart. Mulch after soil temperature has warmed over 60 degrees and plan to stake/cage the plant.

Harvesting: Tomatoes should be picked when they start to show color throughout the fruit. Harvest quickly after a heavy rain since it is more likely to crack. Tomatoes continue to ripen off the vine.
Storing: Tomatoes should not be stored in the refrigerator. Store them at 55 to 70 degrees F. Nutrients decline after the fruit is picked so plan on using within the next 2-3 days.
Preserving: Tomatoes are delicious fresh but if you have an abundance, they may be cooked into a sauce, salsa and canned or frozen. May tomato varieties have been hybridized to have less acid for those with gastrointestinal issues but with less acid, these tomatoes may need an acid added before canning in a hot water bath rather than pressure canning. Refer to extension.sdstate.edu/canning for safe canning procedures.

Upcoming Master Gardener Events

Don't miss our garden tours!

We have a great lineup of 7 different private and community gardens this season. Details of dates, times and a link to buy tickets can be accessed from our website and Facebook page.

Do you have comments, questions, or topic ideas that you would like us to explore? Email us at mcmgnewsletter@gmail.com. We would love to hear from you!

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