



info@minnehahamastergardeners.org

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



*Garlic (*allium sativum*) is from the Allium family (onions, chives) that can be grown in zones 3-8. When choosing garlic, use varieties adapted to cold climates. There are 3 types of garlic: softneck, hardneck and elephant. Most of the softneck types are for mild winters. The hardneck types adapt to zone 4 SD cold winter climate. The hardneck garlic produces scapes in early summer. Scapes produce a flowering stalk that have small, aerial cloves. These cloves can be removed after they start curling and can be eaten. The elephant garlic is a mild bulb closely related to leeks and can be hardy to zone 5 if given deep winter mulch. For fall planting after the first frost and the soil cool, garlic likes well-drained, loose soil and thrives in the sun. Thick mulching will help protect from our cold winters and also decrease weeds in the summer. The cloves can be planted in late winter, but a fall planted garlic produces bigger, better bulbs. For watering, soak the soil thoroughly each week during the growing season but stop*

watering 2 weeks before harvest to avoid staining of the bulb wrappers and disease prevention.

Harvest in midsummer when about $\frac{1}{3}$ of the leaves appear pale and withered, preferably when the soil is dry. Loosen the soil before pulling the whole plant with the bulb. Lay the whole plant in a warm, airy spot protected from rain and direct sun for up to 3-4 weeks. After drying, you can remove any dirt with your hands but keep the protected paper outer wrapper to prevent sprouting and rotting. You can clip the roots and the stems $\frac{1}{2}$ -1 inch above the bulbs. If you want to save some of the cloves for a fall planting, it's recommended to use the biggest cloves. Garlic is nutrient dense in vitamins and minerals and has been used in culinary dishes and medicine. Some of the health benefits have claimed a boost in digestion, lowers cholesterol levels, reduces hypertension, treating colds, eye and ear problems, diarrhea, and your boosts your immune system.

Is your tetanus booster up-to-date?

Donna Haber Master Gardener



Before the gardening season begins, check to see if your tetanus booster is current. Boosters are needed every 10 years to provide protection. Tetanus cases have been on the decline since reporting began in 1947, partly due to routine vaccination for tetanus beginning in infancy. Sporadic cases still occur in the adult population in part due to those who were not vaccinated as a child, or those adults in whom vaccine booster have lapsed. The tetanus bacteria is found in soil, manure, and dust—media that gardeners frequently contact.

Out of the Ordinary

By Vanessa Lambert Master Gardener

Venus Flytrap (Dionaea muscipula)

In a fascinating twist of nature, is the Venus flytrap a carnivorous plant or simply a death trap for insects?

The Venus flytrap is a perennial, native to the coastal boggy areas of North and South Carolina. The plant was then introduced to Florida and New Jersey. In North and South Carolina, the Venus flytrap is an endangered species due to collection. Today, all species of Venus flytrap plants are grown in greenhouses.

This plant gathers nutrients from the soil, by photosynthesis and from ingesting insects.

The leaves of the Venus flytrap open wide, on each leaf are short, stiff hairs called triggers, trichomes or sensitive hairs. When anything bends the hairs, the lobes of the leaf snap shut, trapping the object inside. If the object is not food, like a stick, the trap reopens in 12 hours and “spits” it out. The leaves do not close completely at first, which allows small insects to escape. If the object is food (flies, beetles, slugs, spiders and small frogs) the plant leaves will close completely and form an airtight seal. This seal keeps the digestive fluids in and bacteria out. The digestive fluids are similar to those in our stomachs. It dissolves the soft tissues of the insect but not the exoskeleton. At the end of the digestive process, which lasts 5 to 12 days, the plant re-absorbs its digestive fluids and re-opens. The exoskeleton blows away in the wind, washes out when it rains or serves as a lure for the next meal.

The Venus flytrap is the easiest carnivorous plant to grow. They have few requirements; high humidity, full sunlight, moist acidic soil and rainwater or distilled water. A glass container is best to use, like a large terrarium or fish aquarium. The recommended soil mixture is sand, sphagnum moss and peat. Do not use concrete or terracotta containers as the minerals in the container will harm or kill your plant. Never use fertilizer. They need 6 to 8 hours of direct sunlight and need to be kept away from cold windows.

The plant experiences a dormant period in the winter, from mid-November to mid-February and can be overwintered with a little preparation in your refrigerator. In the summer months,

it can be set outdoors. Growing it indoors, you will have to feed your plant several houseflies or small slugs a month. Never feed the plant hamburger, this causes indigestion so rot may occur and kill your plant.

If set outdoors and it rains, the plant can survive for several months underwater. Outdoors, it should attract enough insects so feeding is not necessary.

The Venus flytrap plant may produce flowers on a tall stalk above the leaves from mid-May to the beginning of June. Small white flowers with a faint green veins will appear. Each flower produces a seed capsule that is flat and contains a single shiny black seed. You should either plant the seed immediately or store them in your refrigerator. If you pinch off the flower stem, the leaves on the plant will grow, as flowering takes a lot of energy away from plant growth. Flytraps also reproduce from its rhizome.

This plant never has more than 7 leaves. If it has more, the plant has started another small plant from the mother plant. Each leaf trap is only good for up to 6 catches of insects. After that the leaf turns brown, withers and falls off.

Lifespan of the Venus trap in the wild is 25 years.

To answer the first question, the Venus flytrap is a carnivorous plant.



Getty Images

Upcoming Dates to Remember

Master Gardener Plant Sale: May 12th at the WH Lyons fairgrounds

Master Gardener Garden Tour: 6/20/18 10:00-8:00

Master Gardener Update: save the date(s) September 28-30 in Sioux Falls; details to come

The Master Gardener update includes a photo contest

The three themes are:

- 1) The Good, the Bad and the Ugly - Discovering insects in the garden
- 2) Water Drops - Viewing our gardens through the unique lens of water droplets.
- 3) Fruits and Seed Pods Throughout the Year - Whether in the heat of late summer or the dead of winter, evidence of fruits and seeds pods can be found in our yards and gardens.



Be thinking of photos that you could submit!

Grow It In Your Garden

Roine Klassen Master Gardener



Calla Lily Scientific name: *Zantedeschia aethiopica*

Though not considered a true lily, consider adding them to your garden this summer. Traditionally the white variety is favored by brides for good luck. The blossoms are long lasting in bouquets or as a cut flowers. Blossoms come in a wide variety of colors besides white; each color has an associated meaning.

The rhizomes should be planted in spring after the risk of frost has passed and the soil has warmed to about 65 degrees. Plant in full sun or partial shade in warmer climates. Once the rhizomes are planted about four inches deep, water the soil well and keep the soil moist with mulch. The mulch will control weeds as well. Fertilize monthly. Space the rhizomes about 6-12 inches apart or if planting in a pot put 2-3 rhizomes in a 10 inch pot.

Deadhead any spent blossom by clipping the stem off near the base to keep the plant attractive and prevent development of seed pods. Dead heading does not encourage further blossom development as in other perennials. Reduce watering at the end of the season to allow the foliage to die back. Dig the plants after the first frost, shake off the soil and allow to dry for a few days. Then store in peat moss in an area where they will not freeze. Problems are few for calla lilies. If “green” flowers are evident it may be due to low light or too much nitrogen. Thrips be a problem.



Prepare Early for Deer

Donna Haber, Master Gardener



As I write this article, snow blankets the ground and this season's gardening is only in the planning stage. Those plans are somewhat dampened, however, by what I see in that serene snow cover—deer tracks and spots where the deer are bedding down. I'm sure THEY are planning their attack on the neighborhood landscape and gardens come spring and summer.

Deer are creatures of habit and have good memories. I know “my” deer travel the same pathways night after night, which I can see by the tracks in the snow. I also know that these

movement patterns may predict where future damage may occur as tender, new vegetation erupts this spring. Come spring I will concentrate my efforts to deter the deer from areas I see them browsing this winter.

There are hundreds, if not thousands, of articles on the web that cover how to control deer damage in landscapes and gardens. Three central themes are present—fences, repellents, and planting vegetation that deer don't like. Google them for ideas. But remember that fences must be 8 feet high, repellents are generally only 15-50% effective, and a hungry deer will eat almost anything. My neighbor put up an electric fence (which the city made him take down!), only to discover that 3 deer had jumped it one evening and joined him as he was weeding in his landscape. Deer tend to avoid small, penned-in places, or hesitate to jump into anything that may entangle them. Deer dislike fuzzy, sticky, stinky, or coarse foliage. You can research which plants deer resist in your area, but I prefer to consult friends and neighbors about their successes, and I never spend more than I am willing to risk when it comes to trying to “outfox” deer. Deer can eat up to 5-10 pounds of vegetation per day which can be disheartening and devastating to gardeners. Secretly, I hope neighbors plant tasty deer-delights so the deer will feast on their foliage and leave mine alone!

The one thing I consistently do every fall is to protect young trees up to 6 to 8 inches in diameter with either tree wrap, tubing, or fencing. In the fall, deer will rub their antler velvet on trunks and limbs of young, tender trees and can destroy a tree overnight.

Wraps need to be removed in the spring. My goal is to wrap by September 1 as our return from a Labor Day trip one year proved to be too late to protect a favorite tree.

What was the best strategy I ever did to keep the deer from eating my garden? I found a site at a community garden in the city where the deer don't roam. Produce yields increased, frustration level decreased, and I can better live in harmony with the deer.

Give Yourself A Green Thumb

Carol Raabe Master Gardener

Hardcore gardeners are not necessarily put off by temperatures in the teens. Many of you have brought your plants in to winter over. You'll be watering, fertilizing and inspecting for pests. Before long, the garden catalogs will arrive, and dreams of the wonderful garden you will have next year will dance in your heads.

Or maybe you are bemoaning the hard work you put in for very little return: lots of watering and weeding for few tomatoes or flowers. Unlike your neighbor, who has a wonderful garden every year, no matter what the conditions. You probably say that she or he has a green thumb, a natural talent for growing plants.

Maybe so. I believe some people instinctively understand plants and their needs. But I also believe anyone who wants to can turn their thumb green by following three basic rules: select the right plants, put them in the right place and maintain them appropriately. Start now (or at least when the catalogs start to arrive), plan to follow those three basic rules, and before long you will have the habit that turns your own thumb green.

The right place for a perennial depends first upon the plant's hardiness. All areas of the country are rated by hardiness zone, the possible low winter temperature for that area. The USDA zone for Chamberlain/Oacoma is 4A (-25 degrees) or 5B (-20 degrees) (Minnehaha county is considered 4a). Some of our yards have "mini-climates," places where slightly more delicate plants can survive. For example, I know a couple who planted Zone 5 holly in a warm, sheltered location in their Zone 4 garden.

Choosing a plant appropriate to your zone takes vigilance when you are shopping: In my opinion, the safest bet with perennials is to choose plants hardy to at least half a zone cooler than your

own. Read the tag. Many nurseries carry perennials fully hardy to only Zone 5 or 6. For others, the hardiness zone may be misleading. “Endless Summer” Hydrangea, for example, are often labeled hardy in Zone 4. But this variety blooms first on old wood that will not often survive winters in Zone 4 or 5. In our area, it is not likely to be an endless bloomer.

For both annuals and perennials, the right place is defined by soil, light and water. In South Dakota, even East River, the soil tends toward alkaline clay. Master Gardeners recommend a soil test for each garden area. A soil test will identify whether the soil is alkaline, neutral, or acid by assigning it a pH number. The composition of each sample will be identified as some combination of sand, loam, clay, and silt. Finally, the test will identify nutrient deficiencies. With that information in hand, you’ll know what to add to your soil to make it desirable for the plants you choose. This will often involve adding compost to improve the composition, limestone or sulfur to change the pH and fertilizer to add nutrients. Continuing to fertilize during the growing season is also part of maintenance. My sister usually fertilizes her potted plants once a week. To me, that seems like a lot, but her potted plants are beautiful.

Water is another component of “the right place” we can often control. I like to plant prairie plants that are drought resistant and adapted to this area. My Pee Gee Hydrangea, though, likes “moist” soil, so I use a drip system attached to a 5 gallon pail to provide a small amount of water constantly. Not only is the drip system a way to change the water conditions of my site, it is also part of plant maintenance. A rule of thumb for maintaining many plants in the ground is one inch of water a week. In our area, potted plants often need to be watered every day and more often than that during hot, windy spells.

Light is the component we can least control. Annuals and perennials are usually labeled with their light requirements, from full shade through part shade, part sun and full sun. Full sun is usually defined as 6 or more hours of sun a day. Full shade hardly ever means full shadow. Even hostas need a little filtered sunlight. In addition, some plants are labeled for morning or afternoon sun. Plants that prefer shade may burn if they receive too much sun. Full sun plants may become “leggy” in too much shade. The wrong light will also affect a plant’s flowering.

So there you are. Make your thumb green by choosing the right plant, putting it in the right place, and maintaining it with regular water and fertilizer. As in most things, making these a habit takes practice. It may take planning. You may add a new practice or two to your gardening routine. But think of it! Your thumb will (probably) be green! And no one will know you grew it yourself.

