



*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](#). The Minnehaha Master Gardeners mission is to provide current, research-based, consumer horticulture information and education to the citizens of South Dakota through Master Gardener projects and services. 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](#).

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# Highlighting Master Gardeners

*by Pam Conklin, Master Gardener*



People become master gardeners for various reasons. Those who stay in the program do so because they are dedicated to the mission of continual learning and providing timely garden knowledge. Mary Lerssen is no exception. She admitted that she didn't really know what the program was about, but since going through it, she has made many friendships, loves the continual learning, working with plants, providing a place for others to garden, working with other volunteers, and sharing her knowledge. She became a master gardener about 15

years ago and sums up her experience by saying, "Time flies when you're having fun!"

Throughout her years as a master gardener, Mary has given several lectures at the annual Spring Fling, a public event filled with horticultural education, fun, and door prizes. Speaking of door prizes, Mary has a unique hobby, she creates decorative art with pheasant feathers. She always donates one for a door prize. She has also opened her backyard to the public during the Sioux Falls garden tours. The project that Mary values most, however, is managing the community gardens.

After joining the Minnehaha County Master Gardeners club, Mary became a team leader at one of the 7 Sioux Falls community gardens that the group oversees. For the past 10 years, she has been the community gardens coordinator, organizing volunteers, and assigning garden plots to applicants. In this volunteer position, she also works with various people in both the government and private sectors to assure the gardening experience is successful. Mary doesn't mind the many hours this volunteer position takes. She is very committed to the concept of providing garden space to a large array of people within Sioux Falls who otherwise may not have an opportunity to garden, explains Mary. [Click here](#) to learn more about community gardens.

Like the other master gardeners that I've had the pleasure of interviewing, Mary is very personable and has an extensive career history. Out of high school, she became a nurse. Her career in nursing allowed her best skills to shine. She started as a

psychiatric nurse at the State Hospital. While there, one of her roles was teaching psychiatric nursing to students. Later in her career, she began a job in the Sioux Falls school system, advising teaching staff and caring for children with medical needs. Mary grew that program from just herself to 26 nurses that she was responsible for before she retired after 30 years in the school system.

Back to her gardening experience ... I asked Mary what is one thing she would always grow, if she couldn't grow anything else. Like most gardeners, she couldn't really commit to just one thing. She has her favorites, among them are peonies and hydrangeas, and vegetables, especially cucumbers. I've tasted Mary's dill pickles and spiced cucumbers, and I'm a fan! As far as growing vegetables goes, one technique that Mary has adopted in her own garden is raised beds. She likes that by simply eliminating rows needed for walking, you can plant closer; thereby increasing your yield. So what does Mary do with all the extra vegetables and fruits? Well, preserving and sharing with friends, of course!

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## 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.*

**Goldenseal** (*Hydrastis canadensis* L.) is in the buttercup family (Ranunculaceae). Goldenseal in its natural habitat will not be found in South Dakota. Goldenseal is a slow growing herb mainly in eastern North America and west to Minnesota in zones 5-8. It prefers a natural habitat of rich, moist forests with at least 75% shade and a light loam soil. Good drainage is critical. Transplanting the rhizome with a few roots and a bud or eye is most successful in a space that can be undisturbed as harvesting may be 3-5 years!. The plant has a flowering stem with two large hairy leaves. Buttercup family species flower has no petals but produces a pistil that looks like a flower. Goldenseal produces an inedible berry that looks similar to a raspberry.



**Health Benefits:** The herb is naturally rich in a class of alkaloid compounds called berberine, hydrastine, and canadine and are found in the highest concentrations in the root. Teas, herbal tonics or capsules may use berberine because of its powerful anti-fungal and anti-bacterial compounds. Goldenseal has been used to treat skin disorders like acne and psoriasis, some viral infections like herpes, sinus infections, indigestion, upper respiratory infections including the common cold.

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## Growing Garlic

*By Lori Lawson, Intern*

Fall is approaching and if you have ever thought about growing your own garlic, now is the time. There are two main types of garlic, hardneck and softneck. Hardneck garlic grows best in climates with a cold, damp spring. It grows with a hard center stalk around which the cloves grow. It has bigger, but less cloves than softneck garlic and grows best in areas with freezing winter temperatures. Hardneck varieties do have a shorter storage time in comparison to the softneck varieties. Softneck garlic is typically grown in areas with warmer winters. Softneck garlic grows with a soft center and has a milder flavor than hardneck varieties. It usually does not produce garlic scapes and has roughly 15-18 garlic cloves per head. Make sure to grow garlic that is appropriate for your area. In northern climates, this is mainly hardneck varieties. When picking a location for planting, keep in mind that garlic prefers 6-8 hours of sunlight per day. Garlic does not tolerate hard-packed soil and will not produce large bulbs in such conditions. To reduce potential disease problems, it is not recommended to plant garlic where onions or garlic has been grown in the past 3-4 years. Buy garlic from a reputable supplier. Bulbs from the grocery store may harbor bacteria, fungal, or viral diseases. Break the bulbs apart into individual cloves keeping the baseplate intact and leave the papery husk on. Wait until the soil is cool before planting, 50 degrees F at 4 inches deep is recommended. If planted too early, the bulb may be more susceptible to winter damage. If planted too late, roots will not have proper time to become established. Typically can plant 2-3 weeks after the first frost or mid-October. Garlic needs a cold period of at least 40 degrees F for 4-8 weeks. Space cloves 4-5 inches apart. Ideally, place 6-8 inches of straw or mulch over the top of planted garlic, this aids in preventing frost heave if there are freeze/thaw cycles. Ideally, water to a depth of at least one inch per week during the growing season. Do not overwater or this could cause rot. Stop watering 2 weeks before harvest to avoid staining bulb wrappers

and promoting diseases. Typically in late summer, hardneck varieties develop growths called scapes which are a stem with a little bulge towards its end that will turn into a flower if left alone. Cut these off so the plant can focus on bulb growth, not reproduction. Save the scapes because they are edible and can be used in a variety of ways. Harvest scapes 7-14 days after they appear. Hardneck garlic can be harvested when the bottom three leaves have dried up. Loosen the soil with a shovel or pitchfork and then dig the garlic carefully so as to not damage the bulbs. After harvesting garlic, let bulbs cure for 4-6 weeks in a cool, dry, well-ventilated space. Once cured, you will want to take off the dirty outer peel. Cut the tops with a knife roughly 1 inch above the bulb and trim the roots. When planning for the next year, you will want to set aside the biggest, healthiest bulbs to replant. Try planting garlic this year, it is a rewarding endeavor.

#### Resources:

Burrows, R. (2021). Planting garlic. Retrieved from

<https://extension.sdstate.edu/planting-garlic>.

Grow Organic. (2021). A world of galic flavors to grow. Retrieved from

<https://www.groworganic.com/blogs/articles/a-world-of-garlic-flavors-to-grow>

Moyer, M. (2006). Diseases of garlic: Various pests. Retrieved from

<http://plantclinic.cornell.edu/factsheets/garlicdiseases.pdf>

Peaceful Valley Farm and Garden Supply. (2017). Garlic planting and growing guide.

Retrieved from <https://pdfs.groworganic.com/media/pdfs/garlic-l.pdf>

Prairie Coteau Farms. (2021). Garlic growing basics. Retrieved from

<https://www.prairiegarlic.com/about#growing-basics>

Seed Savers Exchange (2017). How to grow garlic (*Allium sativum*). Retrieved from

<https://www.seedsavers.org/site/pdf/grow-save-garlic.pdf>

The Editors. (2021). Planting, growing, and harvesting garlic. Retrieved from

<https://www.almanac.com/plant/garlic#>

University of Minnesota Extension. (2018). Growing garlic in the home garden.

Retrieved from <https://extension.umn.edu/vegetables/growing-garlic>

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## Begonias

*by Carla Goetsch, Master Gardener*

Begonia is a genus of perennial flowering plants in the family Begoniaceae. The genus contains more than 2,000 different plant species. Because they are relatively easy to



hybridize, it has led to an enormous number of cultivars. The begonia is native to moist subtropical and tropical climates. Many are commonly grown indoors as ornamental houseplants in cooler climates.

The different groups of begonias have different cultural requirements, but most are considered perennials only in zone 10/11 or as houseplants. Most require bright shade; few will tolerate full sun, especially in warmer climates. In general, begonias require a well-drained growing medium that is neither constantly wet nor allowed to dry out completely. Many begonias will grow and flower year-round except for tuberous begonias, which usually have a dormant period. Because of the very large number of plants in the begonia genus, they are subdivided into different cultivar groups which are often determined by their roots.

The [American Begonia Society](#) classifies begonias into several major groups:

- **Cane begonia** – forms tough, [bamboo](#)-like canes with thick stems and an upright growth habit. Many types of cane begonias are known for their wing-shaped leaves with polka dot pattern, toothed edge leaves, and wide array of colorful flowers. Angel wing and dragon begonias are types of cane begonias. They reach about 1' tall indoors, but with more intense light, generally outdoors(not direct sun), they can reach up to 5' tall. .

**Shrub-like:** May be difficult to determine the difference between cane and shrub like begonia. Cane begonias have bamboo-like shoots with nodes, whereas the shrub-like begonias are more full and the stems are not as sturdy.

- **Tuberous begonias** grow from roots called corms or tubers (bulbs). These produce the most spectacular blooms. The tubers are often dug in the fall to protect from cold and to give the tubers a much needed dormant period.
- **Rieger Begonias** can be tricky to get to bloom since it requires constant temperature (70 degrees). But once it blooms, the flowers can last up to 6 months.
- **Semperflorens** (wax or fibrous rooted begonias) are the most common type of begonia. It is the type we typically buy in the greenhouses in the spring to be grown as an annual. They mature to about 12" and flowers can be white, pink, or red.
- **Rex or Rhizomatous Begonias** have thick fleshy roots and are grown for their leaves rather than flowers. They often have a fuzzy leaf texture. This category is

frequently the most likely to be hybridized. Oval leaves may even grow in a spiral pattern.

- **Trailing-scandent begonias** are mostly grown as basket plants, so that their vine-like growth habit will keep flowers at eye level. The long pendulous stems are fragile and are the most shallow rooted begonia. They like tight roots with good drainage. They are very easy to propagate just by breaking off stems and repotting.
- **Thick-stemmed** are begonias that do not correspond to any formal taxonomic groupings or phylogeny. Many species and hybrids have characteristics of more than one group or do not fit well in any of them.



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## No More Hair!

### *Effective Methods of Repelling Animals in Your Garden*

*By Jason Cruse, Master Gardener*

Gardening, especially vegetable gardening, is full of “old wives tales”, many of which are maintained because “I saw it on the internet!” Methods of repelling unwanted animals from gardens are no exception. This article will focus on proven methods of repelling deer, rabbits and voles from gardens.

To begin, here are a few of the better known, but unproven, methods of deterring pests:

- Human hair
- Bars of soap
- Wind chimes
- Pieces of hose cut to look like snakes
- Fishing line around your plants

None of these have any basis in science. Iowa State Extension says that these methods are “not reliably effective” meaning that there is no evidence proving their effectiveness. Purdue University extension goes so far as to simply say that these home remedies “do not work.”

Let’s move on to methods of repelling pests that have been shown to be effective.

*Voles* are attracted, unfortunately, by loose vegetation, including mulch. Many of us use mulch to keep down weeds. If voles appear in your garden, you may wish to discontinue the use of mulch. In addition, for home gardens, burying hardware cloth up to 6” below the surface can help limit their infiltration. Trapping/poisoning are also effective—check local laws before embarking on either of these.

*Rabbits* Rabbits have the ability to devour gardens. The best method of keeping rabbits out of the garden is a fence, with a small mesh. Fencing at the base should be very secure at the base, if not buried a little below the surface and then secured. Chemical repellents can be used, but “are not designed to be used on plants or plant parts intended for human consumption” (IA State). Chemicals also need to be reapplied when new plant growth occurs and/or after heavy rain. Removal of habitat, such as piles of weeds or brush, can also help.

*Deer* Deer are not easily repelled by fences. Not only do deer have the ability to jump, necessitating at least a 6’ fence (if not 8’), but younger deer also have the ability to crawl *under* loose fencing. Deer can be repelled by products with whole egg solids (at least 37%) or capsicum. Even though Thiram is also a fungicide, it also acts as a taste repellent for trees and shrubs. It is not considered organic, but products with egg base are.



A couple of additional notes about repellants. First, all will need to be reapplied after a) heavy rain/watering; b) whenever new growth occurs or c) after 2 months. Second, none are completely effective. For instance, the University of Massachusetts found that blood meal, often sold as a natural repellant, will repel *some* rabbits, while others will march right through even fresh blood meal toward a tasty snack. Finally, natural barriers, like marigolds and other flowers, have not been shown to be effective in limiting animal access. There are *some* strong-smelling flowers that are deer resistant. Often, this means that deer won't eat them, not that they won't eat what is *beyond* them.

Over time, investing in a good fence, properly installed and maintained, is likely a gardener's best and most cost-effective method of keeping beasties out of the garden.

#### *Sources*

Iowa State University Extension  
New Mexico State University Extension  
Purdue University Extension  
University of Kentucky Extension  
University of Massachusetts Extension  
West Virginia Extension

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## Boulevard Gardens

*By Pam Conklin, Master Gardener*

We received a request from one of our readers who was looking for information about planting in the boulevard; that strip of lawn that stretches between sidewalks and streets. Each town may have its own rules for planting in the right-of-way. Aside from arming you with a link to the rules Sioux Falls has for planting in boulevards, this article will hopefully alert you to common issues you may encounter when planting in the parking strip.

In Sioux Falls, home owners are required to maintain the boulevard, despite not really owning that little strip of property. Therefore, we should be aware of, and follow the [rules outlined by the city](#). Large shade trees and turf grass (Kentucky blue, rye, and fescue) have been the standard landscape choice for many years; these are no longer

our only option. And, since the appearance of Emerald Ash Borer in 2018, we've been losing a lot of street trees. Before replanting trees, make sure you check out the city rules about trees in the parking strip, as things have changed. (Use the link above.)

The city has done a fair job at providing guidelines and lists of plants that can hold up to some of the abuses parking strips endure. But what exactly are some of the challenges to planting in the public right-of-way, and what can you do to help plants survive? The list can be daunting: foot traffic, dogs, road salt, compaction, shade and roots from trees, or scorching sun, drainage issues, weeds, and litter. With this in mind, let's address a few solutions.

Fixing the soil and compaction can be as simple as aerating and applying gypsum, which is used to correct damage from dogs, road salt and compaction. If the area has poor drainage, adding compost and turning in some perlite will further improve soil quality. Weeds and other vegetation can be removed by hand, using a sod cutter, or other means. Just be aware of existing plants that you want to keep. If trees are planted, be careful not to disturb roots. To prevent plants from being crushed or broken, consider leaving enough room for people to enter or exit parked cars. It's also helpful to leave space for you to get between plants in order to weed and clean out any litter that may blow into your planting. Other than these tips, follow the rules prescribed by the city. Make it easy on yourself when starting your boulevard garden. Take walks through various neighborhoods to see what others are planting and soon your garden will evolve into just what you want.



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# Local Master Gardener Hosted Events!

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*Thanks to all master gardeners for your educational contributions!*