



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.



Queen Anne's lace (*Daucus carota*) is a biennial from the **Apiaceae** family (Parsley). Queen Anne's Lace is also called wild carrot. Queen Anne's Lace grows up to 4 feet tall and likes full sun, dry to moist disturbed soils but tolerate a variety of soils. The first year, the feathery, fern-like leaves appear in a rosette about 5 inches tall and arched. The 2nd year, the plant grows from hairy, hollow stems and has an umbrella-shaped flower cluster at the top. The small, 5-petaled white flowers are small umbels within a large umbel that may have 15-60 flowers and bloom June through September. Each floret produces two seeds. The deep taproots are difficult to remove.



Minnesota has listed Queen Anne's Lace as a restricted noxious weed. The first year leaves are edible and used in salads. Use the roots in the 1st year for soups and tea since the flowering root in the 2nd year becomes woody. The seeds have been used to prevent kidney stones and used as a digestive aid for diarrhea, gas or indigestion. The seeds have been used to stimulate the appetite and for menstrual cramps. Tea can be made by using 1 tsp of the seeds per cup of boiling water.

Goldenrod

By Roine Klassen, Master Gardener

Goldenrod Solidago is in the genus of 77 species of flowering plants in the US and Canada. It is in the aster family: **Asteraceae**.

Goldenrod is the state flower of Kentucky and Nebraska (1985). This perennial grows on a woody stem with spiky tooth-like parts and clusters of yellow flowers. While yellow is the predominant color, the flowers may also be cream or white. The plant can be propagated from the roots, bulbs, stems and seeds. Many consider the goldenrod to be an aggressive spreader. One gardener said to transplant it often so it doesn't get too comfortable in one spot. Better to choose a cultivar that doesn't spread as aggressive. Some varieties only grow from cuttings and will not reseed themselves and become weedy.

Some people claim that goldenrod causes seasonal allergies for them but goldenrod has virtually no pollen. Ragweed, however, does bloom at the same time and can cause allergic reactions.

Many lifeforms are attracted to the seeds of the Goldenrod like birds, butterflies, hummingbirds and finches. Even praying mantis choose the stems of the plant to locate their egg cases. Mantis prey on the insects that feed on goldenrod flowers. Deer and rabbits usually find something they like better in spring to nibble on rather than goldenrod.

This perennial likes full sun and average to dry soil. If there is room in your garden, fall is a good time to sow seeds in a prepared seedbed so germination can occur in spring. Choose the variety carefully. It will grow in USDA zones from 3-4.

www.ediblewildfood.com www.thespruce.com/goldenrod

www.gardengatemagazine.com/web-extras (where to buy these goldenrod varieties)



Bulbs for Spring Color

By Vanessa Lambert, Master Gardener

Bulbs for Spring Color

Preparation is the key to seasonal bulb color. Spring bulbs need to go into the ground in fall while summer bloomers should be planted by spring.

Living in zone 4 means the bulbs need to be hardy and withstand temperatures of -20 to -30 degrees Fahrenheit. There are a host of cold hardy bulbs. Some of those include tulips, crocus, glory of the snow, allium, daffodils, fritillaria, hyacinth, iris, snowdrops and Siberian squill.

When buying bulbs, size is important, look for plump, firm bulbs. Check the root base to make sure this area is firm and intact. Keep bulbs cool (60-65 degrees) until planting time, usually in October. Bulbs need time to establish a healthy root system prior to the onset of winter.

Most bulbs need sunshine so select a site that will provide at least 5 to 6 hours of direct sunlight a day. Adequate drainage is necessary as most bulbs will not tolerate poor drainage and will rot easily if too wet.

Planting depth and soil preparation are some of the important steps to take to ensure blooming of the bulbs. Good soil can prevent rot and freeze damaging while allowing good root formation and nutrient delivery. Bulb depths differ by plant types so be sure to check the package. A good rule of thumb is plant bulbs 2 ½ to 3 times the diameter of the bulb in depth.

When planting, loosen the soil below the depth the bulb is to be planted. If you place fertilizer in the hole, add a layer of soil to ensure the bulbs do not contact the fertilizer directly.

Normal rainfall usually provides enough moisture for bulbs, but during dry weather, water at weekly intervals. Don't neglect your bulbs after they bloom. After they bloom, fertilize them lightly, usually with a 5-10-10 fertilizer. Avoid high nitrogen fertilizer. You can use bone meal as an extra source of phosphorus.

After the bulb blooms, cut off the faded bloom to prevent seed formation. Development of seed pods takes stored food from the bulbs. Don't cut the leaves until they turn yellow. Then remove.

If bulbs have become crowded or need to be moved to another site, move only after the foliage has faded. Divide by digging up the entire clump. Separate the bulbs and replant them to other locations and you can replace one in the space where it originally was.



Fritillaria bulbs produce large bell shaped flowers that add variety and interest to your garden. Deer avoid both the plants and the flowers. The bulbs have a skunky odor and are known to repel voles. For a natural look, plant fritillaria in groups of 6 bulbs.



Siberian squill is a member of the lily family. It is one of the first flowering bulbs to brighten the landscape in early spring. The bulb produces dark green, grass-like leaves that emerge in early spring. Soon after, one or more arching flower stalks (up to 6 inches) are produced from the center of the rosette of foliage. Each flower stalk support one to three flowers. Each flower is an intense blue color. Plant squill in masses (recommended 20 bulbs per square foot). Deer, rabbits and voles don't care for this plant. This is one of the recommended bulbs to force

during the winter months.



Glory-of-the-snow is a plant that blooms early enough that its flowers sometime poke through the snow. The bulb produces small, upward facing, star-shaped flowers that are pale blue with a white center. Each bulb produces a receme of 5-10 flowers on brownish stems. There are several other varieties that produce white or pink flowers. Because this bulb is unaffected by black walnut toxicity, they do well as an ornamental around black walnut trees.



Snowdrops thrive in South Dakota winters since we always have cold weather. Snowdrops dislike warm winters. Plant these bulbs immediately after getting them, they do not like to sit around and can easily dry out. Snowdrops are a pest-free plant. After several years you will need to dig out the bulbs which have multiplied from the original bulb. Plant them in groups of 10-20 bulbs. The flower bulbs are dormant by late spring, so remember where you plant them so you don't accidentally disturb them. They pair well with ferns and hosta.

References: University of Wisconsin Extension, Pennsylvania State Extension

Photographs: www.theflowerexpert.com and Siberian Squill: Image by quattrastagiani.

Fall Garden Clean-Up

By Bonnie Lynch, Master Gardener

1. Houseplants

Bring in your houseplants that escaped the confines of your house for a summer outdoors. If they have grown vigorously, prune and repot as needed. Check for insects prior to bringing them inside--washing/lightly spraying the plant with plain water will remove many pests. Avoiding abrupt changes in light and temperature, it's best to move them indoors when night temperatures consistently fall into the lower 50's. It's also a good time to check the plants that live indoors to see if they need repotting, pruning, or dividing. If you planted herbs in pots, you can place them indoors in a sunny spot, water well and harvest throughout the winter.

2. Vegetable gardens and annual flower beds

Harvest all usable vegetables and annual flowers before frost. Remove leftover plants (including as much of the root system as you can get) and put them into the compost pile. If plants show signs of disease, burn them or discard separately—do not compost. Bacteria in these plants can over winter in the soil and contaminate next year's plantings. You can rake aged compost into the soil bed or add other organic material. Sowing a cover crop (such as winter rye) or covering the garden with a layer of fall leaves helps prevent winter erosion.

3. Perennial flower beds, vines and berries

Remove weeds. After a couple of frosts, mulch perennial beds. Tops of plants can be cut back now or in early spring (leaving tops on over winter adds interest and color to your landscape; grasses are attractive left intact). New perennials can be planted in fall and established perennials can be divided—these are best done in early fall (mid-September to mid-October) to allow time for plants to root before the soil cools. With a sharp pair of pruning shears, cut back any vines and berries (grapes, blackberries, raspberries, etc) leaving several of the strongest brown canes for every foot of your row. New canes will come up in the spring. Some gardeners mound up the soil around the canes to protect them and prevent hard frosts from heaving them out of the ground. Strawberry beds should be thinned and covered with straw to keep them protected during the winter months. To help them survive the winter, perennials such as asparagus can be cut back as they fade.

4. Trees and shrubs

Trees may be pruned after they go dormant (lose their leaves) or in early spring. Prune late summer and fall flowering shrubs after they go dormant. DO NOT prune evergreens or spring-flowering shrubs in fall. Clean up leaves and foliage and compost. Continue regular watering as long as ground is not frozen. While the mower is out, mow around fruit trees one last time to discourage mice from nesting there. Install mouse guards made of fine mesh hardware cloth around the base of your fruit trees to keep mice and voles from eating the bark and killing the trees over the winter.

5. Other outdoor tasks

Plant spring flowering bulbs in early fall (mid-September to mid-October). Insure proper storage of seeds (containers in a cool, dark, dry location), fertilizer and garden chemicals (avoid freezing). If you have an in-ground irrigation system, be sure that it is cleared of water so it won't freeze up and damage pipes. Compost garden debris and autumn leaves. Cover your compost pile with plastic sheeting or a thick layer of straw before snow falls. Fall is a great time to create new planting beds. One suggestion, with no digging necessary, is to set your mower as low as it will go and scalp the grass, then cover the area with a thick layer of newspapers. Cover the papers with a layer of compost and top it all off with lots of chopped leaves. Hopefully, in spring, you'll have a lovely new planting bed full of worms.

6. Care of garden containers and ornaments

Your containers need to be emptied and cleaned. Pull and toss dead plants, dump the soil into your garden or compost bin. Wash the containers in warm, soapy water and let them air dry in the sun. Store them upside down in your garage. If you have garden ornaments, don't forget about them! Left out in the winter, resin ornaments can crack and peel – so it's best to move them into your garage. The same thing goes for concrete ornaments – the constant freezing and thawing is likely to cause cracks as moisture gathers. Any garden stakes, tomato cages and trellises should be brought in for the winter, as well. Spray with a garden hose to clean, allow them to dry thoroughly in the sun.

7. End of season tool care

Organize your tools in your garage or garden shed. Before you put away your tools, clean them with a 10% bleach solution, sharpen any spades or shovels, and use a light coating of oil on the metal tools to prevent oxidation and rusting. If your tools have wooden handles, clean them well. Rub boiled linseed oil into the handles—this helps prevent cracking (and getting splinters in your hands!). If the handles are in very rough shape, sand them first with fine-grit paper. When you're finished using your garden hose to clean up all of your other tools, stretch it out fully on a downhill slope to allow all of the water to run out. Then loosely roll the hose up and store it for the winter. Repair any leaks. Store/hang hose nozzles and sprinkler attachments so any water will drain out.

8. Garden notes

Record the layout of this season's garden. Knowing what you planted where this season will help you plan your garden for next season. Rotating crops is necessary and will help control diseases and increase soil nutrition. Growing plants of the same family in the same place year after year allows pests and diseases specific to that family to become entrenched and can deplete the soil of the same nutrients each year.

