

# From The Ground Up

VOLUME V ISSUE III EDITOR: MARGARET MURPHY, MASTER GARDENER JUNE, 2013  
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## Heirlooms

**By: Margaret Murphy, Master Gardener**

By definition, an heirloom is a valuable object that has belonged to a family for several generations. This fits with the description of heirloom vegetables. They come from seeds carefully preserved and passed down over the years usually by a family or group. Seeds are often selected from plants that performed best on flavor and eating quality. In order to be an heirloom, the seeds must have historical or cultural significance. Each heirloom comes with a story of how it has been maintained through the years. Plus, their seeds need to be passed down from generation to generation for at least 50 years, though some folks holdfast to it being a 100 years or longer.

All heirlooms are open-pollinated meaning they are pollinated by insects or wind. However, not all open-pollinated varieties are heirlooms. If they lack the necessary story of their history, then they are not considered heirlooms. Open-pollinated plants have stable traits from one generation to the next and each variety is genetically distinct. Their ability to breed true-to-type not only helps preserve genetic diversity, but also is why seeds that are saved and passed down through the years will continue to produce a plant much like it's ancestors (although with natural pollination you may see some variation from individual to individual). Heirlooms are usually well-suited

to their region having adapted to the growing conditions over many generations. Unlike heirlooms, offspring of

hybrid plants rarely resemble their parents. Hybrids result from crossing dissimilar plants by controlled pollination. The goal is to produce a new plant with the selected characteristics of the parent plants. Typically, developing a hybrid involves a series of crosses that continues until the desired traits from each parent are revealed in the offspring. It may take the breeder years to develop the right combination of qualities. As a result, hybrid offspring can have a random mix of traits so future generations generally will not resemble their parent plants. For this reason, hybrid seeds are not saved year to year.

Heirloom vegetables can often be found at farmers markets or through Community Supported Agriculture. (CSAs) They might also be found in the local food sections of some grocery stores.

If purchasing an heirloom, pay attention to the name. Heirlooms often have names that tell you a little bit about themselves. Take tomatoes for example. 'Amish Paste', is an heirloom variety with meaty flesh that is often used to make paste and comes from the Amish



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in Wisconsin. The 'Wapsipinicon Peach' is round and fuzzy making it peach-like and the 'Yellow Pear' – well, I think you can figure out what that one looks like. This year, I'm planting a collection of heirloom sunflowers, which names include 'Autumn Beauty', 'Lemon Queen' and 'Italian White'. There is one called 'Teddy Bear'. Guess I'll have to wait to see what kind of flower that one produces.

## In the News

**From: Cleone Thompson, President**

The Minnehaha Master Gardeners have decided to postpone their annual garden tour until 2014 due to last year's drought and this year's late, cold spring and ice storm. Please join us next year and volunteer your garden for others to enjoy. We can be reached through our web site: [www@minnehahamastergardeners.org](http://www@minnehahamastergardeners.org).

Our summer office hours are Mondays, Wednesdays, and

Thursdays 10am to 4pm at the SDSU Extension Office located at 2001 E 8<sup>th</sup> St, Sioux Falls. Phone: 605-782-3290.

Minnehaha Master Gardener  
President Cleone Thompson



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# JUNE 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2 <a href="#">Raise the height of your mower blades</a>	3	4 <a href="#">Turn compost pile on regular basis</a>	5	6 <a href="#">Mulch the garden to conserve soil moisture &amp; control weeds</a>	7	8
9 National Strawberry Rhubarb Pie Day	10	11	12 <a href="#">Plant groundcover in shady areas where grass won't grow</a>	13	14 <i>Flag Day</i>	15 <a href="#">Stop harvesting rhubarb and asparagus</a>
16 <i>Father's Day</i> Give dad a new garden tool for Father's Day	17 National Eat Your Vegetables Day	18	19	20 Continue to sow seeds of sweet corn and beans for extended harvest	21 <i>Summer</i>	22
23 30	24 Remove spent blooms on geraniums and marigolds	25	26	27	28	29 <a href="#">Renovate June-bearing strawberries after last harvest</a>

## The South Dakota Herb Garden

By Priscilla Jurkovich, Master Gardener

**Rosemary** (*Rosemarinus officinalis*) is from the Lamiaceae or mint family. The plant can get to 4-6 feet and looks like a shrub with long narrow, fragrant leaves. In South Dakota zone 4, it is considered an annual (zone 6-8 perennial) and can be brought in the home during the winter months. Rosemary is drought resistant and easy to grow in full sun. Propagation by seed can be challenging so new growth (in the spring) is a great time to use cuttings or layering of the new growth.



Photo by Priscilla Jurkovich

Rosemary improves and strengthens the memory. Historically, rosemary was entwined into the bride's head wreath and tied with ribbons as a symbol of remembrance. It stimulates the circulatory system by increasing the oxygen supply to the brain and improves memory and concentration. It can also ease headaches, migraines, and encourage hair growth.

Rosemary can aid in recovery from long-term stress, raise the spirits, and soothe nervous tension. It has anti-microbial, anti-inflammatory and anti-oxidant constituents, which is beneficial for the entire nervous, circulatory and respiratory systems. It has been reported to inhibit cancer cells, kidney stones and fight bacterial and fungal infections. In the 16<sup>th</sup> century, people carried rosemary in pouches to purify the air, ward off the plague and prevent typhoid. It's used in many culinary dishes because of its assistance with the digestion of beans and rich meats like pork and lamb.

# Companions in the Garden

By Margaret Murphy, Master Gardener

The practice of companion planting has been around for a long time. It dates back centuries and has been employed in gardens all over the world. It involves growing two or more crops together for the benefit of one or all of them. A good example of this is the Three Sisters garden, a technique pioneered by Native Americans. In this garden corn, pole beans and winter squash are planted together. The plants mutually benefit each other as they grow. The corn provides a structure for the climbing beans, the beans put nitrogen back into the soil, and the squash leaves serve as living mulch that conserves soil moisture and shades out weeds.

There are a number of ways companion plants may benefit one another. Certain plants help nourish the soil for their companions. As mentioned above, legumes such as pole beans fix nitrogen. These make good companions for heavy feeders like corn. Then there are plants that are noted for improving the overall health or flavor of a companion. Basil is hailed as a good partner to tomatoes since it is said to enrich both their growth and taste. Garlic enhances the flavor and development of beets and members of the cabbage family. Chamomile offers similar benefits to the cabbage family as well as to onions. Chives are said to improve carrots and tomatoes while chervil will help out your radishes.

Most modern gardeners, however, are interested in companion planting as a way for controlling pests. As any gardener knows deterring pests from your garden is an ongoing venture. Every summer there comes a time when I lose the battle over my collard greens to the cabbage moth larvae. And these days more and more people are looking for non-chemical ways to address bug problems. Companion planting offers several approaches to reduce the impact of pests. One example is to intersperse flowers and herbs among your vegetables instead of planting rows of mono-crops. This prevents pests from easily moving from one plant to the next uninterrupted. Flowers and herbs can also attract beneficial insects and birds. Providing a desirable habitat for favorable predators can help keep pest populations in check.

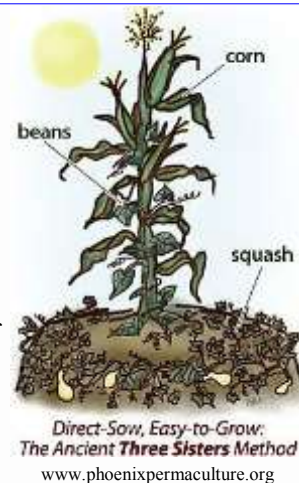
Another approach is to use plants that impart a strong scent that either

deters or confuses the pest. Many herbs, alliums, and flowers have a long tradition in companion planting as pest repellents. Cornell University Cooperative Extension's publication *Companion Planting with Herbs* offers an extensive list of plants that ward off a variety of insects. A few ideas for aphids include spearmint, tansy, pennyroyal, garlic and chives. For the cabbage moth, my nemesis, plant some mint, rosemary, thyme, or sage around your cole crops. If you have problems with the Colorado potato beetle, grow some horseradish next to your potatoes. Tansy works to repel the cucumber beetle, squash bug and cutworm. To discourage rabbits plant an assortment of alliums

throughout the garden. Most gardeners are aware of the reputation marigolds have as a pest deterrent. We always have a border of marigolds framing part of our vegetable garden. If nothing else it attracts butterflies and looks cheerful.

To date, there is only limited scientific research on companion planting. Most information heralding the benefits of this technique comes from a mixture of centuries old observations and backyard gardening experiments. The method is also supported by years of use in organic farming.

So if you are looking for a nature friendly way to benefit your garden this season, consider making room to plant some companions for your vegetables. Design your own experiment and keep notes as to what works and what does not. In the end you'll be rewarded with a beautiful garden filled with vegetables, flowers and herbs and, hopefully, fewer pests.



## Pest of the Month

### June Bug (*Phyllophaga* sp.)

By Deb Wallin, Master Gardener



Photo by G. McIlveen, Jr

During the late spring and summer months, June bugs make their appearance. While these beetles may not seem menacing like the one that smacked me in the head and sent me screaming into the house, which, in turn, freaked out the dog and eventually disrupted a quiet neighborhood; they are serious landscape pest that have the potential to wreck havoc on garden plants.

June bugs are insects that typically measure up to 1 inch in length, are brown in color with a hard shell. These insects are in the scarab beetle family. June bugs damage garden plants and grass in both the larval form and the adult form.

June bug larvae are white grubs that feed on organic matter. They eat roots of grasses, vegetable and ornamental plants at the appendage called a nodule, located on the roots of the plant. This is the point source by which these types of vegetation absorb

vital nutrients through the soil. White grub worms feed on these nodules thereby choking off the plants ability to survive.

Wilted, brown or excessive dropping of leaves and large brown patches of grass usually indicate a grub infestation. Grubs pupate in the soil and later emerge as adult beetles.

Adults begin to emerge in spring. Large numbers of beetles can be attracted to lights and be a nuisance at night. Peak flights occur in mid to late June. Females are less attracted to lights and tunnel 2 to 5 inches into the soil and deposit eggs. In 3 to 4 weeks, small grubs (larvae) hatch from eggs and develop. Adult June bugs damage garden plants by feeding on the leaves, causing them to appear ragged or have holes in the leaves. Heavy infestations of June bugs can completely defoliate garden plants in just a few days.

There are a few natural predators that can help keep June bugs under control. Frogs, birds and snakes all feed on June bug larvae reducing their numbers. Home gardeners can remove small numbers of June bugs from plants by hand, placing them in a bucket of soapy water to drown. When June bug larvae are damaging lawn grass, applying an insecticide to the soil may help control them.

Photos and additional information from Texas A&M, AgriLife Extension



## Save the Date

- Next Minnehaha Master Gardener meeting, Monday, July 8 at 7 p.m.
- Garden Tour, Wednesday, July 10, CANCELLED.
- SDSU Extension and Team Nutrition will be hosting youth and school garden workshops for teachers, afterschool and summer programs and for those interested in teaching children through a garden. The workshops will be held in Sioux Falls and Rapid City starting July 9 & July 23, respectively. Click [here](#) for more information.

## Master Gardener Notes

- New office hours for Master Gardener office at SDSU Extension site. Now open Mondays, Wednesdays and Thursdays, 10 a.m. to 4 p.m.
- Keep track of your hours! Send completed [forms](#) to Mary Roduner by mail or FAX.
- Write an article for the *From the Ground Up* newsletter.

For more information call the Master Gardener office at 605-782-3290 or send an [email](#).

Plus, check out our [website](#)!

## Plant of the Month

By Deb Wallin, Master Gardener

### Mossy-Cup or Bur-Oak (*Quercus macrocarpa*)

This valuable tree is more or less common throughout the entire state of South Dakota. It may be recognized by the mossy fringe on the acorn-cups. The wood is firm, heavy and strong and is very valuable for fuel and fence-posts. In the eastern part of the state it frequently becomes a large tree but in the west it is smaller, seldom exceeding 20 feet in height in the Black Hills. Bur oaks have a very long life living 200 years or more. The bark is dark gray and deeply ridged and furrowed. Bur oak has a mellow fall color, yellow-green to yellow-brown. The tree adapts to a wide range of soil conditions and has few pest problems. It is considered a slow grower, but with proper care, it can grow 15" a year.

The 'Mighty Oak' is a worthy description for this and other magnificent oaks trees. The oak has symbolized strength, honor, endurance and liberty. The Druids believed that the oak tree leaf had strong healing powers. The Celts considered the oak leaf as a powerful symbol. During Roman times, victorious commanders were awarded oak leaf laurels. The oak leaf, in present times, is a symbol of rank and regalia in the United States Armed Forces. Both are symbolized by oak leaves, wherein a silver leaf is designated for Lt. Colonel or Commander, and a gold leaf indicates Lt. Commander or Major. In the year 2004, the oak was officially declared as the National Tree of the United States symbolizing the nation's strength.



Photo © The Arbor Day Foundation



Photo © John H. Hegmann

[www.arborday.org](http://www.arborday.org)

## Meet the New Master Gardener Hotline Coordinator in Minnehaha County



Hello Master Gardeners,

My name is Liz Blaaid and I am the new Extension MG Hotline Coordinator here in Sioux Falls. My position here is to help the office run smoothly on a day to day basis and to try to get you guys to come in to volunteer hours at our call center. I just graduated from the University of South Dakota in May and I am from Mitchell, South Dakota. I found my passion for plants from working at a nursery in Mitchell for five summers, taking the Master Gardener classes, and taking a lot of biology classes in college. I will be in the office on Mondays, Wednesdays, and Thursdays from 10 a.m. to 4 p.m. so feel free to call me anytime! I am always looking for volunteers here at the call center, so please let me know if you are interested.

Thanks everyone!

Liz Blaaid

Extension MG Hotline Coordinator

Office: 605-782-3298, [Elizabeth.blaaid@sdstate.edu](mailto:Elizabeth.blaaid@sdstate.edu)

## Garden Fun Facts



By Deb Wallin, Master Gardener

*Fun Facts (I have learned) about Container Gardens ....*

**Use Containers that retain water...** Clay pots are porous and moisture can easily escape, which means more watering. Use of glazed, plastic, metal or sealed wooden containers will help keep moisture in the soil. If you want to use the clay pots due to their natural appeal, use a smaller plastic container for the plant and slip inside clay pot.

**Extending moisture further...** When planting your containers, place small water filled sponges in the soil. They can be placed close to the bottom, along the sides or even cut into 1" cubes and distributed around the roots. When watering, the sponges will soak up the water and stop it from escaping the container. Therefore the roots will have moisture source when they need it.

**Coffee filters...** put in the bottom of the pot, will help keep soil in the container and still allow drainage. They will also keep destructive bugs for crawling in.

**Drainage...** Gravel can actually cause problems with drainage by blocking the hole, which in turn can cause the roots to rot. They also can cause additional weight that is not necessary. Consider using crushed aluminum cans or packing peanuts. They will allow proper drainage and will lighten the load to save your back. (Don't forget the coffee filter).

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