This issue I am looking for something in particular. I have an area in full sun that needs to be landscaped. I would like something of interest May to June. I am not particular about the color but want to use a native. I further narrow it down by choosing trees.

I decide to use the Grow Native plant picker at http://grownative.org/plant-picker/ where I find many alternatives to the standard Oak or Maple.

**American Basswood, *Tilia americana***, is a great shade tree with large paper leaves. It provides pollen for bees during late spring with fragrant flowers and has a beautiful yellow fall color.

**American Hornbeam, *Carpinus caroliniana***, is a medium sized tree with serrated leaves. Spring flowers are followed by light green panicles of layered seed bracts. The bark provides year round interest, it is smooth and muscular. Fall color is orange to red.

**Green Hawthorn, *Crataegus viridis***, has clusters of white flowers in May. In the fall the foliage is redish-purple and red fruit appears through September. It has fewer thorns than most hawthorn and the bark will exfoliate with age.

**Fringetree, *Chionanthus virginicus***, has large, airy flowers in May or June followed by blue fruit on the female trees. The leaves are bright yellow in fall.

**Kentucky Coffeetree, *Gymnocladus dioicus***, is a favorite because of the large, open shade that it provides. It will have large, white flower panicles late spring followed by 6 inch bean pods summer to fall. Fall color is
yellow if plants are healthy. It is drought tolerant once established.

**Sassafras, Sassafras albidum**, is a medium tree with small yellow flowers in spring, blue and red fruit in summer and scarlet red to orange fall foliage. The leaves are distinct in that there are four different shapes on one tree.

**Yellowwood, Cladrastis kentukea**, is a medium sized tree with weeping panicles of fragrant, white flowers in May. These are followed by smaller seed clusters of seed pods in summer which turn brown in October. The green foliage turns to bright yellow in fall. The bark is very smooth and muscular providing year round interest.

---

**Controlling Wild Violets**  
by Donna Aufdenberg

Wild violets are perennial weeds that often grow in clumps. The plants form rhizomes that support heart-shaped leaves and flowers that grow around 2-5 inches tall. The flowers have five petals and are usually purple, but can also be white or yellow. The flowers usually appear in early spring and summer, and the plants are most often found in shady areas. This weed is commonly found as a weed of pastures, turfgrass, and landscapes.

Fall is the best time of year to control the wild violets. It’s a perennial weed with a long tap root on it so control can be difficult. Use a broadleaf killer that contains 2,4-D or Dicamba, and it will selectively kill the violets in lawn settings without damaging the grass. These chemicals can also be used in landscapes, however, use with caution since 2,4-D will damage most broadleaf landscape plants. Because violets have such a waxy leaf surface, adding a spreader-sticker product to the herbicide mixture will result in better adhesion of the herbicide to the leaf surfaces, resulting in better control. Ask for a spreader-sticker product at your local garden center.

One treatment won’t do it. Gardeners will have to make multiple treatments. Spring or summer applications will only burn back the leaf tissue, and the plants will grow back. Herbicides that are applied in fall translocate down into the tap root better and give better success with control.
May Gardening Calendar
By Donna Aufdenberg

Outdoor Flowering Plants and Ornamentals
- Pinch azaleas and rhododendron blossoms as they fade. Fertilize after they bloom and use a fertilizer that will acidify the soil.
- Do not remove spring bulb foliage prematurely or next year’s flower production will decline.
- Begin to plant summer annuals.
- Pinch back mums to promote bushy growth.
- Lightly side-dress perennials, including spring bulbs, with a 5-10-10 or 10-10-10 fertilizer, being careful to avoid the center or crown of the plant.
- If you love to garden, but don’t have a lot of time, choose plants that are easy to maintain. Plants that do not need “deadheading” include begonia, impatiens, coleus, alyssum, ageratum, lobelia, vinca and salvia.

Vegetable Gardening
- Growing lettuce under screening materials will slow bolting and extend harvests into hot weather.
- Place cutworm collars around young transplants. Collars are easily made from cardboard strips.
- Control caterpillars on broccoli and cabbage plants by handpicking or use biological sprays such as Bt.
- Place a stake by seeds of squash and cucumbers when planting in hills to locate the root zone watering site after the vines have run.
- Watch for striped and spotted cucumber beetles now. Both may spread wilt and mosaic diseases to squash and cucumber plants.
- Make new sowings of warm-season vegetables after harvesting early crops.
- Plant sweet corn and beans every two weeks through June for an extended harvest.
- To control weeds in the garden: prevent weed seed germination, destroy weeds that sprout before they bear seed, and do not use mulches or compost contaminated with weed seeds.
- Inspect cauliflower every few days. Cut off the curd when the flower sections begin to separate.

Fruits and Nuts
- Prune unwanted shoots as they appear on fruit trees.
- Follow fruit tree spray guide by the University of Missouri Extension.

Miscellaneous
- Herbs planted in average soils need no extra fertilizer. Too much may reduce flavor and pungency at harvest.
- Watch for fireflies on warm nights. Both adults and larvae are important predators. Collecting may reduce this benefit.
- Four to five layers of newspaper will serve as an effective mulch in the garden. Cover it with sawdust or straw to reduce the white glare and prevent it from blowing away.

Using Pesticides Safely In The Garden
Select the appropriate product for the problem (Weed, Insect or Disease)
Read the LABEL! Use product according to the label.
Ensure that the product is labeled for the pest AND the crop/plant desired.
Make sure pets and children are out of the area before mixing and applying the pesticides.
Wear clothing that will protect you when spraying - long sleeves, long pants and closed-toe shoes!
Mix pesticides outdoors or in well-ventilated areas. Mix only what you need to use in the short time.
Avoid windy conditions - make sure to close doors and windows to your home.
Cucumbers are one of the most popular crops in the home garden, either for pickling or slicing. Cucumbers are a vining crop that can require substantial growing space but the space necessary can be reduced by growing them on trellises and they can also be grown in containers. There are many varieties of cucumber for a gardener to choose from. These include the small gherkin type, the long, thin slicing variety along with yellow varieties.

Cucumbers are a subtropical crop, meaning they thrive in warm temperatures; 65 to 75°F is the ideal range. They will not tolerate a frost and prefer warm soil temperatures along with the warm air temps.

Cucumbers are an interesting plant because one vine bears two kinds of flowers, male and female. The first flowers are always male and will drop off without bearing fruit. Flowers appearing after that will be both male and female so pollination can occur and fruit will set. The male flowers will have a straight stem and the female flowers will have the cucumber visible right behind the flower. The flowers are pollinated by bees or can be hand pollinated. There are also gynoecious plants (plants with only female flowers) available. These will come with another seed that must be planted for pollination.

Seeds can be sown indoors and then transplanted when the temperatures warm for a head start or they can be direct seeded into the garden. Spacing depends on if they are going to be trellised or allowed to vine on the ground. Trellising requires less space and makes picking easier. Varieties are chosen according to use, some are better for slicing while others are pickling varieties.

Cucumbers are ready for harvest 50 to 70 days from planting. Harvest based on size needed for their intended use. If cucumbers reach the yellowish stage, they need to be picked to keep the plant producing new fruit but they will be bitter and have large seeds. Harvest by cutting the stem ¼ inch above the fruit and try to avoid trampling the vines.

**Problems**

Bacterial wilt can be a problem in cucumbers. The vines will suddenly wilt and die. This is a disease carried by striped and spotted cucumber beetles. The best method of control for bacterial wilt is to control the cucumber beetles. Another cause of vines wilting and dying is squash vine borer, where the borer drills into the base of the stem and eats the inside.

Bitter cucumbers can happen when they are overripe or stressed during growth. Heat, nutrient, or water stress can cause bitterness.

Finally, to lay your worries to rest, cucumbers can NOT cross pollinate with cantaloupes, watermelons, or squash because they are different species!
While the meteorologist will tell you that there is no weather pattern which suggests that we are destined for another drought in the summer of 2013, common sense says that we should be prepared for one. Now is the time to prepare for that drought. The garden is just going in and before it is fully planted make sure to follow the basic rules of gardening to ensure your plants are as prepared as they can be.

**Organic Matter and Soil:** If your soil is high in clay then you are already at a disadvantage. Soil organic matter should be at least 5% for good root penetration and for the best chance of holding water for longer periods of time. Compost is the best answer for incorporating organic matter into the soil. In the absence of compost any plant material which will decompose can be added to increase organic matter.

**Mulch:** By adding mulch to the surface of soil you will reduce evaporation, reduce water runoff and prevent weeds (competition). Although this may seem like a small step it could mean the difference in days when a drought sets in.

**Mapping out the Garden:** When planting the garden make sure to place the maximum number of plants in a given area to reduce weed pressure (competition) and to shade the soil. A green canopy will help plants and their vegetables to remain healthy. Follow the vegetable planting calendar, [http://extension.missouri.edu/explorepdf/agguides/hort/g06201.pdf](http://extension.missouri.edu/explorepdf/agguides/hort/g06201.pdf), from the University of Missouri as a guide and alter spacing based on experience in your garden space.

**Water when Water is needed:** Think about the most crucial times to provide water to your vegetable plants. While they do require water during all stages in their life-cycle they require the most water both when they are first planted after germination or recovering from the shock of transplant and when they begin to form vegetables.

When first established in the garden plants are producing root growth beneath the soil. This growth can make or break a plant in a drought year. If roots penetrate deep into the soil they stand a better chance of finding water. Further along in their life plants will need adequate moisture during seed formation. It is then they will produce an edible product.

**Select Varieties for Drought:** When selecting plants to grow in the garden choose what you love and consider drought resistance. Are there alternatives that can be grown that will better withstand the heat and lack of rain. Try these - rhubarb (established), Swiss chard, asparagus (established), Jerusalem artichoke, chicpea, ‘Tendergreen’ or ‘Tanya’s Pink Pod’ bush beans, cowpea, ‘Jackson Wonder’ or ‘Henderson’ lima bean, ‘Green Striped Cushaw’ squash, ‘Iroquois’ cantaloupe, okra, peppers, ‘Oakleaf’ or ‘Black Seeded Simpson’ or ‘Butter Crunch’ or ‘Mascara’ lettuce, Armenian cucumber, ‘Seminole’ pumpkin, sage, oregano, thyme, lavender, rosemary and ‘Pineapple’ or ‘SunGold’ or ‘Heidi’ or ‘Sioux’ or ‘Porter’ tomato.

**Irrigate:** No matter how much you prepare the garden you still need water. Drip irrigation will insure the water will penetrate the soil and not land on leaves to evaporate in the air. Plan to use a cheap soaker hose woven throughout the garden if a drip system is out of your price range. A soaker hose is no more expensive than a sprinkler but will not intensify disease issues as overhead irrigation can. Drip irrigation or soaker hoses can be covered with the mulch, instead of resting on top, to help move water into soil. Do not wait and put irrigation in when the rain stops. Put the irrigation in now so it is ready if the rain stops. With a little luck, the rain will continue when we need it.
Want to try growing herbs? A good starting place is container gardening on a patio, deck, or your kitchen windowsill. A bonus is that the herbs will be convenient for harvesting when you cook. Herbs have compact growth patterns that are perfect for containers, but they also have some requirements. Sufficient light is very important; six hours of sunlight is necessary. Also, beware of overwatering. When the soil is dry to the touch, water until it runs out holes in the bottom of the container; never let herbs sit in a saucer of water. Herbs need only a little fertilizer; an organic fertilizer of kelp and fish emulsion every two to three weeks is ample. Pinch back new growth for a bushier appearance.

You have many choices of herbs to consider as many grow quite well in containers. Tender herbs, like the culinary sages and rosemary, are obvious choices for containers since they don’t survive the winter in cold climates. Lavender, marjoram, tarragon, sage, thyme, savories, dill, and sweet bay are also favorites. Keep mint in a container and it won’t ramble all over your outdoor garden. Some gardeners like to plant herbs according to their uses, like grouping herbs for pizza or herbs for soups; others might like to mix herbs with flowering annuals. You can group and regroup herbs by planting singly in smaller containers, or with several herbs in larger containers. Gather ready-to-plant containers and experiment with different arrangements until you find the one that pleases you.

When planting in containers, you have many choices. Containers are portable. They can be rotated, moved, and taken indoors for protection as needed. Clay pots, glazed pots, plastic pots, half barrels, and an endless assortment of other possibilities can be considered. The essential factor is a planter with a solid bottom that has drainage holes. Fill with a good soil blend that contains one part sterilized compost and two parts commercial potting mix. When you are ready to plant, make sure the mix is moist but not wet. Set the taller herbs in the center of the container and shorter ones toward the edge. Plant combinations need to share the same growing conditions not just be attractive like chervil, coriander, parsley, chives, and sorrel. Consider also herbs that flower at different times. Try experimenting with different containers and plants until you find the right ones for you!

For more information on herbs, check out University of Missouri Guide G6470 Growing Herbs at Home. It can also be found online at http://extension.missouri.edu/p/g6470

Basil grown in containers is very popular. Picture Courtesy of Iowa State University Extension.

These herbs are suitable for container growing. In the heat of summer, regular watering and fertilization are necessary.
## The Garden Spade

### May 2013

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Delta MG, 7:00pm @ the Library, Sikeston, MO</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Kress Farm Garden Preserve Annual Native Plant Sale; 9am - 3pm; 5137 Glade Chapel Rd., Hillsboro</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Parkland MG, 6:30pm @ Botkin Lumber Co. in Farmington Industrial Park</td>
<td>Poplar Bluff MG, 6:00pm @ Gene Rowland’s in Dexter, MO</td>
<td></td>
<td></td>
<td>Pecan Grafting Demo 1:00pm, from Campbell Hwy 53 (NW), Hwy DD (E). CR 203 (N) 2 miles</td>
<td>Ste. Genevieve MG Meeting, 6:30pm @ the Ste. Genevieve Co. Ext. Center</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sand Prairie Guided Tour; 10 - 12:30pm; Meet at 10am at the Cape Girardeau Nature Center; RSVP at 888-843-6739</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cape Girardeau MG, 7:00pm @ Cape County Ext. Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Perry Co. MG 6:30 pm, Perry Co. Ext. Center</td>
</tr>
</tbody>
</table>

### June

3 - Parkland MGs 1st Monday at 6:30pm, Botkin Lumber CO, Farmington Industrial Park  
4 - Poplar Bluff MGs 1st Tuesday at 6:00pm, PB Ext Center in Poplar Bluff  
13 - Ste. Genevieve MGs 2nd Thursday, at Ste. Gen. County Ext. Center at 6:30pm  
13 - Delta Area MGs 2nd Thursday at 7:00pm, Medical Arts Building, Sikeston, MO  
15 - Cooking with Herbs; Ste. Genevieve, MO  
18 - Season Long Bloom; Library, Caruthersville, MO 573-333-2480  
20 - Cape Girardeau County MGs 3rd Thursday at Cape County Ext. Center at 7pm  

### Upcoming Events

July 16 - 4:30 pm @ Rice Hall, Mineral Area College in Park Hills, MO  
Starting Fall Garden plants from Seed; Moles, Moles, Moles; Drought Tolerant Landscaping  
July 24 - Advanced Training: Creating Flower Displays; 5-8pm; 1st Presbyterian Church, Poplar Bluff, MO Fee: $15  
August 13 - Master Gardener Core Training Begins in Poplar Bluff, MO  

If you have a horticultural related event for the calendar call 573-686-8064 to add it.
Editor’s Corner

The Garden Spade is published monthly by University of Missouri Extension staff for individuals and families living in Southeast and East Central Missouri. This newsletter is provided by your local extension council.

Editors:
Katie Kammler, Plant Science Specialist
255 Market St., Ste. Genevieve, MO 63670
573-883-3548

Sarah Denkler, Horticulture Specialist
222 North Broadway Street, Poplar Bluff, MO 63901
573-686-8064

Donna Aufdenberg, Horticulture Specialist
304 High Street, PO Box 19, Marble Hill, MO 63764
573-238-2420

We welcome and encourage Master Gardener groups and individuals to submit items to the newsletter. We encourage the submission of any news such as upcoming volunteer opportunities, community events related to gardening, warm wishes or congratulations to fellow gardeners. We also encourage Master Gardeners sharing experiences and writing articles on timely topics.

All entries into the group news sections must be received by 4:30 on the 15th of each month for the following months news.

Email News to: kammlerk@missouri.edu, denklers@missouri.edu, or aufdenbergd@missouri.edu

Disclaimer. No special endorsement of mentioned products is intended, nor is criticism implied of similar products not mentioned.