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Cool Weather Crops
Master Gardener Garden Art & Plant Sale

Upcoming meetings:
Bullitt County Master Gardeners’ Assoc. & Horticulture Council
Meet on the 1st Tuesday of Each Month

April 3rd 6 PM
May 1st 10 AM

MARK YOUR CALENDARS & register for our 2018 Classes

March
- Monday the 5th at 6pm - Fruit Tree Sprays
- Thursday the 15th at 6pm - Hybridizing Daylilies with Donald Wolff
- Monday the 26th at 6pm - Orchard Production with Ray Armstrong
- Wednesday the 28th - PBPT Certification (GAP)

April
- Friday the 6th at 6pm - Container Gardening with Fay Bennett
- Monday the 16th - Grafting with Ray Armstrong
- Friday the 20th at 6pm - Gardening with Hummingbirds in Mind with David Puckett

Saturday the 28th 8-2pm - Master Gardener 10th Annual Plant and Garden Art Sale

May
- Monday the 7th at 6pm - Pruning Fruit Trees with Ray Armstrong
- Thursday the 10th at 6pm - Rain Gardens
- Friday the 18th at 6pm - Make a Hypertufa Pot with Becca Huffman

All classes offered by the Horticulture Program require preregistration. Call 543-2257 to RSVP so you are ensured handouts and notice of reschedule or cancellation.
Spring Blooming Shrubs

In Kentucky, the **Downy Serviceberry** *Amelanchier arborea* can grow up to 30’ tall, into a single stem tree or a multi stemmed shrub, growth rate is medium. About two weeks before dogwoods bloom you will see perfect fragrant early spring flowers, white 2 - 4 inches long, pendulous racemes lasting 4 to 7 days. Flowers are followed by red-purple fruit, that changes from green to red to purplish black fully ripe in June, which birds love to eat. Downy serviceberry can be grown in full sun or partial shade. Plants should be placed into moist, well-drained, acidic soil. This tree is not tolerant of pollution and is unreliable when under stress. Hardy in Zones 4 to 9, bark is grayish often with a reddish cast, becoming ridged and furrowed as tree ages.

As a member of the Rose Family *Rosaceae*, en masse plantings can attract the same pests that love tasty petals, but in landscape plantings these incidences are low.

Flowering Dogwoods *Cornaceae*

Flowering dogwood is a beautiful native tree with four-season appeal. It has lovely flowers in spring, attractive foliage in summer and fall, colorful fruit in fall and an interesting growth habit that provides winter interest. Unfortunately, this tree is susceptible to a number of insect and disease problems.

Rutgers University has introduced hybrids of *C. florida* and *C. kousa*, known as Rutgers Stellar series. The hybrids start blooming after *C. florida* finishes and produce no fruit, so no berries for the birds. However, they are highly resistant to dogwood borer and moderately to highly resistant to dogwood anthracnose. They reach an average height of 20 to 30 feet with a 15 to 25 foot spread. Two selected for landscapes are the *Cornus x ‘Rutfan’* (Stardust Dogwood) is a low spreading tree, smaller than the other Rutgers hybrids. This tree has heavy branching to the ground, like a hedge. Its white bracts do not overlap and have acute tips. It begins to flower at the same time flowering dogwood’s flowering period is ending. The *Cornus x ‘Rutgan’* (Stellar Pink Dogwood) is a low-branching tree with rounded, soft pink bracts. This tree blooms one week after flowering dogwoods.
**Elderberry** is an edible landscape plant. The most common is the American elder (*Sambucus canadensis*), which is found along roadways, in ditches, and along woodlands. It grows very well in our dry, hot summers. This plant grows 8 to 10 feet tall and wide, and can be a bit scraggly unless kept under control. The 5 to 12 inch creamy white flowers in June and July are followed by tasty ¼ inch purple-black fruit in August and September. The American elder is closely related to the European elder (*Sambucus nigra*). The flowers and berries of *S. nigra* have a more pronounced flavor and aroma, and are sweeter and bigger than those of *S. Canadensis*. *S. nigra* is significantly less hardy in the northeastern U.S. than our native *S. Canadensis*.

The leaves, stems, unripe berries, seeds and roots of elderberry contain small amounts of hydrocyanic acid that is converted into cyanide when consumed by people. These compounds are neutralized if the berries are cooked, cool processed or fermented. The levels vary by species and seem to not be very high in *S. Canadensis*. However, it is still important to pick out the stems, leaves and green berries when cleaning flowers and berries for consumption.

**Sweetshrub** (*Calycanthus floridus*) average 3 to 9 feet tall by 6 to 12 feet wide. Grows somewhat taller in shade than in sun. Tolerant of a wide range of soils, but prefers rich loams. Prune immediately after flowering to shape or maintain compact form. Tends to sucker and often forms colonies in the wild. Remove root suckers promptly if naturalization is not desired. Sweetshrubs have no serious insect or disease problems however, Phytophthora or Pythium root rots can occur in very poorly drained soil.

Note flower structure and different fragrance between varieties. The *Calycanthus ‘Hartlage Wine’* has a 3”, slightly fragrant flower with notably more rounded petals than the Carolina Allspice, that is native across Southeastern United States.
Flowering Quince
There are two types of quinces. The brilliant orange or red variety is *Chaenomeles speciosa*. It often grows to a height and spread of 10 feet and has thorns. A related variety, *Cydonia oblongata*, grows even larger with a height of 15 to 20 feet and is not spiny. Its flowers are white to soft pink. Both produce an edible fruit called a pome that has a diameter of about 3.5 inches. The fruit ripens on the bushes, turning yellow in October. When picked, the fruit has a fragrant, almost perfumed skin, but is hard as a Bocce ball.

If you have the room on your property and want to add an old-time favorite to your landscape, think about planting a red-orange quince. Look for ‘Scarlet Storm’ *Chaenomeles speciosa‘ in your local nursery, the flower looks like small roses.

If having quince fruit is of interest, consider *Cydonia oblongata*. It tends to be a more attractive landscape plant.

Viburnum
common name is Arrowwood viburnum, and it is a deciduous shrub of the Adoxaceae family. Safe in zones 3-8. Plants in full sun typically do not reach maximum height, height range is 3’ to 5’, width 3’ to 4’. Shrubs in part to full shade grow larger. Bloom time is May to June with a white bloom and blue fruit. Maintenance is low and they are showy. Viburnum attract birds and butterflies, they also tolerate clay soil and thrive planted near black walnut trees.

The variety we have pictured is *Viburnum dentatum 'Christom' BLUE MUFFIN and it produces Non-fragrant white flowers in flat-topped corymb (to 4" diameter) that appear in late spring. Flowers give way to blue-black, berry-like drupes which are quite attractive to birds and wildlife. Ovate, toothed, glossy dark green leaves (to 4" long). Variable fall color ranges from drab yellow to attractive shades of orange and red.

However if you want to focus on a viburnum for fragrance, select Spice Girl viburnum, which offers dozens of pink flowers; or Spice Baby is a dwarf variety that’s great for small space landscapes.
**Variegated Forsythia** *Forsythia* 'Fiesta or Forsythia × intermedia 'Variegata'(pictured) are two varieties with variegated leaves. These shrubs are hybrids between weeping forsythia (*F. suspensa*) and greenstem forsythia (*F. viridissima*). Forsythia is in the Oleaceae family, deciduous, safe in Zones 5 to 8 reaching Height: 8 to 10 feet and width of 10 to 12 feet. Yellow blooms emerge before foliage from March to April. Plant tolerates full sun to part shade, but best flower production occurs in full sun.

Water requirements are medium and maintenance is low and include pruning unless naturalized. Forsythia will tolerate deer, clay soil, and the chemical that black walnuts produce.

This shrub is sometimes referred to as the harbinger of spring or the ultimate symbol of spring because the flowers brighten the landscape at a time when not much else is in bloom. They are often used as indicator plants to remind homeowners when to use preemergent products for crabgrass control.

Notwithstanding their excellent late winter-early spring bloom, however, these hybrid shrubs are often described as one-season wonders which fade into the landscape after bloom. Fall foliage color is typically an ordinary yellow-green, but sometimes purplish.

**Witch Hazel** A few of the spring-flowering witch hazels can start blooming by the end of December or early January depending upon weather, but peak occurs between mid January and mid March. Early March is a good time to see many in bloom.

The majority of vernal (Ozark), Chinese and Japanese witch hazels typically flower sometime from January into March. The intermedia witch hazels are hybrids resulting from crosses between the Japanese and Chinese species, and in an average year at any one time, bloom from February thru mid March.

Of the different types, Eastern and vernal arguably have the best fragrance. For the most part, the intermedias have the brightest fall colors and the largest flowers, but the least fragrance.

*H. mollis*, the bright yellow Chinese witch hazel, has a long bloom period (January through March) and has quarter-sized yellow flowers that are less likely to be fragrant (an exception is ‘Goldcrest’).
**Dwarf Flowering Almond** is a small, multi-stemmed shrub that typically grows to 4-5’ tall and spreads to 3-4’ wide. It has thin stems and an irregular form. Over time, it may open up and appear cosmetically unkempt, particularly if not pruned. Hardy in zone 5 to 9, mature height is 4’ to 5’, width is 3’ - 4’. Pink to white, single or double, cherry-like flowers (1/2”) bloom in mid-spring about April, along the stems. Flowers are followed by subglobose dark red fruits (3/8” in diameter). Pointed, serrulate, oblong leaves (to 4” long) are light green and offer no distinct fall color. 'Sinensis' is noted for its double pink flowers (each to 1 1/4” diameter) and shiny green foliage. Synonymous with and commonly sold as ‘Rosea Plena’. If double white flowers are desired, obtain ‘Alba Plena’.

**Rhododendron** is a broadleaf evergreen best grown in acidic, humus rich, moisture-retentive but well-drained soils in part shade to full shade. Prefers a sun dappled shade. Foliage may scorch in full sun. Acidify soils prior to planting and thereafter as needed. Plant in a location protected from strong winter winds. Good soil drainage is essential as they do not like “wet feet”. Poor drainage inevitably leads to root rot, therefore raised beds/plantings should be considered in heavy clay soils. Rhododendrons have shallow, fibrous root systems, so do not cultivate around plants. They benefit greatly from a mulch, wood chips, bark or pine needles, to help retain moisture and stabilize soil temperatures. Roots must never be allowed to dry out. Clip off spent flower clusters immediately after bloom as practicable.

PJM Group is a series of rhododendron hybrids that resulted from crosses between *R. carolinianum* and *R. dauricum* var. *sempervirens*. These hybrids do not produce seed, are compact, rounded, small-leaved, evergreen shrubs that generally grow to 3-6’ tall and are noted for having exceptional winter hardiness. They have lavender, rose or pink flowers (the color varies with cultivar) and bloom in clusters in April. Elliptic, hairless, leathery, dark green leaves 2.5” long. Foliage acquires purple tones in winter.

A healthy plant in the proper environment with proper care should have limited problems, however be aware that they are susceptible to many insect and disease problems, including but not limited to canker, crown rot, root rot, leaf spot, rust, powdery mildew, aphids, borers, lacebugs, leafhoppers, mealybugs, mites, nematodes, scale, thrips and whitefly.
Bullitt County Master Gardeners

10th Annual Garden Art & Plant Sale

April 28, 2018 from 8am to 2pm

Sculptures by Jay in Kentucky

Jay is a full time artist living in St. Paris, Ohio. Completely self-taught, he sculpts in clay and makes his own molds. The molds are hand poured, one at a time by adults with disabilities at a sheltered workshop, TAC Enterprises, in Springfield, Ohio. Jay says he is the "average person's sculptor" - meaning his art is very affordable.

Front Porch Crafts

Sheryl Scott of Front Porch Crafts does some really cool things with gourds.

More new vendors are expected as time draws nearer. We also have our faithful repeat vendors as well.

Some of our new vendors for 2018
<table>
<thead>
<tr>
<th>Trees</th>
<th>Pollinators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullitt County Conservation District (free tree give-away)</td>
<td>Idlewild Butterfly Farm</td>
</tr>
<tr>
<td>Rock Bridge Trees</td>
<td>Goat Hollow Queen (honey products and soaps and lotions)</td>
</tr>
<tr>
<td><strong>Landscape and Garden Art</strong></td>
<td><strong>Ponds and Water Plants</strong></td>
</tr>
<tr>
<td>Joleen Hibben (upcycled garden art)</td>
<td>Family Thyme Creations</td>
</tr>
<tr>
<td>Jacob’s Welded Art</td>
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<tr>
<td>Advanced Crafts</td>
<td></td>
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<tr>
<td>The Junk Mama (upcycled garden art)</td>
<td></td>
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<tr>
<td>Collins Concrete and Garden</td>
<td></td>
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<tr>
<td>Dixie Yard Works</td>
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<tr>
<td>Neal Cardin</td>
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<tr>
<td>Down on the Farm Antiques and Sharon Clark</td>
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<tr>
<td>Garden Art by Jim</td>
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<tr>
<td>Nature’s Wood Products</td>
<td></td>
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<tr>
<td><strong>Walking Sticks</strong></td>
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<tr>
<td>Stick Works</td>
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<tr>
<td><strong>Food</strong></td>
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<tr>
<td>Food Truck by</td>
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<tr>
<td>John and Sherri Habenstein</td>
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<tr>
<td><strong>Bird Houses and Bird Feeding Supplies</strong></td>
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<tr>
<td>Birds on a Wire</td>
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<tr>
<td>Coops D’Villa</td>
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<tr>
<td>Wood Knot Wood Shop</td>
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<tr>
<td><strong>MORE TO COME,</strong></td>
<td></td>
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<tr>
<td><strong>SEE YOU THERE!</strong></td>
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</tbody>
</table>
Cool Weather Crops:
Jump Starting Spring Vegetables!

Homeowners can plant or harvest something from the garden almost all year. The two major planting periods, however, are spring (March to May) and fall (mid-July to September). The spring plantings are harvested in June and July, while the fall plantings are harvested from October to December. The spring garden contains cool season crops that thrive in cool early spring temperatures and often suffer when the weather warms in the summer.

Some of these crops can be planted directly in the garden soil, while due to the need for consistent soil temperature, others will need to be started in a greenhouse or other suitable growing area and then transplanted to the garden (Table 10).

Spring garden plants grow best with relatively cool air temperatures (50° to 65°F) and are raised either for their leaves, stems or flower buds. Peas are grown for their immature fruits. These crops produce their vegetative growth during spring’s short, cool days. If they are planted too late in the spring, summer heat reduces their quality by forcing some to flower and form seeds, or ‘bolt’, and others to develop off flavors, bitterness, poor texture and low yields.

Avoid these problems by planting spring vegetables as soon as the soil can be worked in the spring since light frost will not injure them. Plant either seeds or transplants, allowing the vegetables to reach edible maturity before hot

<table>
<thead>
<tr>
<th>Vegetable</th>
<th>Seeds</th>
<th>Transplants</th>
<th>Days to Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beets</td>
<td>x</td>
<td></td>
<td>55-60</td>
</tr>
<tr>
<td>Bibb lettuce</td>
<td>x</td>
<td>x</td>
<td>60-80</td>
</tr>
<tr>
<td>Broccoli</td>
<td>x</td>
<td></td>
<td>40-90</td>
</tr>
<tr>
<td>Brussels sprouts</td>
<td>x</td>
<td></td>
<td>80-90</td>
</tr>
<tr>
<td>Cabbage</td>
<td>x</td>
<td></td>
<td>60-100</td>
</tr>
<tr>
<td>Carrots</td>
<td></td>
<td>x</td>
<td>60-80</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>x</td>
<td></td>
<td>50-100</td>
</tr>
<tr>
<td>Celery</td>
<td>x</td>
<td></td>
<td>100-130</td>
</tr>
<tr>
<td>Chinese cabbage</td>
<td>x</td>
<td>x</td>
<td>43-75</td>
</tr>
<tr>
<td>Collards</td>
<td></td>
<td>x</td>
<td>75-90</td>
</tr>
<tr>
<td>Endive</td>
<td>x</td>
<td>x</td>
<td>60-90</td>
</tr>
<tr>
<td>Kale</td>
<td>x</td>
<td>x</td>
<td>50-60</td>
</tr>
<tr>
<td>Kohlrabi</td>
<td>x</td>
<td></td>
<td>50-70</td>
</tr>
<tr>
<td>Leaf lettuce</td>
<td>x</td>
<td>x</td>
<td>40-50</td>
</tr>
<tr>
<td>Mustard greens</td>
<td>x</td>
<td></td>
<td>35-60</td>
</tr>
<tr>
<td>Onions</td>
<td>x</td>
<td>x</td>
<td>40-120</td>
</tr>
<tr>
<td>Peas</td>
<td>x</td>
<td></td>
<td>60-80</td>
</tr>
<tr>
<td>Potatoes</td>
<td>x</td>
<td></td>
<td>90-140</td>
</tr>
<tr>
<td>Radishes</td>
<td>x</td>
<td></td>
<td>20-30</td>
</tr>
<tr>
<td>Spinach</td>
<td>x</td>
<td></td>
<td>40-70</td>
</tr>
<tr>
<td>Swiss chard</td>
<td>x</td>
<td>x</td>
<td>55-60</td>
</tr>
<tr>
<td>Turnips</td>
<td>x</td>
<td></td>
<td>40-60</td>
</tr>
<tr>
<td>Turnip greens</td>
<td>x</td>
<td></td>
<td>30-50</td>
</tr>
</tbody>
</table>

1 Days given are for the early to late varieties.
2 Onions are also available in sets.
3 Potatoes are available as seed pieces.
summer days arrive. Plant as soon as the soil is workable and dry enough so it does not form wet clods. Do not work the soil when it is wet. Doing so can ruin the texture for several years.

Do not use organic mulches in early spring. Rather, let as much sunlight as possible reach the soil to warm it. After May 1, you can use mulches to conserve soil moisture and help prevent weeds.

Polyethylene row covers have been used for a long time to help vegetables grow and ripen early in the spring. However, Kentucky’s springs are often too warm to benefit much from early season row covers.

Vegetables like carrots, turnips, leeks, cabbage, lettuce, spinach, kale, and other leafy greens, are generally planted in the spring garden where they tolerate frost and freezing conditions. These vegetables are fairly low growing which would allow them to mature under row covers and their proximity to the ground helps protect them during extremely cold weather. Using solid plastic covering (low tunnels, see below), these greens may grow well into winter or even all winter long when temperature are not extreme (subzero F). But the nature of the low tunnel will require the growing beds to be ventilated during sunny conditions.

Gardeners have a choice of self-ventilating covers (slitted or perforated), low tunnel covers, or floating row covers. The slitted and perforated types as well as the plastic used for low tunnels are available in clear and opaque polyethylene and require wire hoops or PVC pipe for support. To construct such tunnels after
planting, push hoops (made from no. 9 galvanized wire or PVC pipe) into the ground, and spaced 5 feet apart over the row (Figure 8).

Then when frost or freeze is predicted, cover them with clear polyethylene. Bury the edges of the plastic in the ground. For floating row covers, simply place the fabric directly over the crop and secure at the edges. The slitted sides of perforated covers and the loose nature of floating row covers allow needed ventilation on sunny days to prevent overheating. However, these season extension devices provide less protection from cold at night. Low tunnels made with solid plastic offer the best protection at night but must be ventilated by loosening the sides or ends during sunny days. Without ventilation, temperatures under the cover may quickly reach crop-damaging levels on sunny days. Raised bed gardens are generally easily adapted to low tunnel culture.

Here are a few more tips to make your spring garden a success:

- Making multiple plantings of many of the more rapidly maturing cool-season vegetables will considerably extend the harvest season.
- Be sure to harden transplants of cool-season vegetables before they are planted in the garden.
- Lower the temperature at which they are growing about 10 degrees for 10 days or two weeks prior to transplanting.
- Support “Sugar Snap” peas on a tall trellis, as they frequently grow 6 feet tall.
- Blanch cauliflower by tying the leaves over the barely visible heads, to keep them white, tender and mild-flavored.
- Cut potato seed pieces several days before planting them and fewer will rot.
- Harvest mature onions before it rains on them and dry them thoroughly to reduce rotting in storage. Store them as close to 40 degrees as possible.
- Arcadia broccoli is resistant to soft rot. It is slow to head and requires high fertility to develop good quality heads.
Alternative Master Gardener Program

Prior to Program:
Interview & one time Class Fee of $60.00 is Required

Prior to Completion:
Background check, Required classes, and Certification Test

Pre-registration of classes is required.

All classes are subject to cancellation based on participation.

Date | Time | Class                              
-----|------|------------------------------------
3/7/2018 | 10-2pm | Insects & Vertibrate Pests       
3/20/2018 | 6pm | Tree Fruits                     
3/28/2018 | 10-2pm | Pesticides & Plant Pathology    
4/4/2018 | 10-2pm | Plant Propagation & LAB          
4/12/2018 | 6pm | Vegetables                       
4/18/2018 | 10-2pm | Vegetables & Organic             
5/4/2018 | 6pm | Organic                          
5/15/2018 | 10-2pm | Turf & Weeds                    
5/23/2018 | 10-2pm | TBD                              
6/13/2018 | 10-2pm | TBD                              
6/21/2018 | 6pm | Propagation                      
7/17/2018 | 6pm | Plant Pathology                  
7/19/2018 | 10-2pm | Annual & Perennial Flowers       
8/2/2018 | 6pm | Plant Pathology LAB              
8/29/2018 | 10-2pm | Plant Pathology & LAB            
9/13/2018 | 6pm | Woody's                          
9/26/2018 | 10-2pm | Woody's & LAB                   

Call or come to our office for a complete class schedule

Bullitt County
Lorilee George Horticulture Agent
384 Halls Lane, Shepherdsville KY 40165
For details call 502-543-2257
Master Gardeners’
10th Annual Garden Art & Plant Sale
Saturday - April 28th 2018
Rain or Shine 8 AM to 2 PM
Bullitt County
Cooperative Extension Office
384 Halls Lane, Shepherdsville KY 40165
Vegetables, herbs, fish, aquatics, flowers,
tropicals and yard art from 30 vendors
Numerous Vendors Selling a wide variety
of Horticulture Related Items
Call 543-2257 for information
Vendor Booths $25.00
Check out Bullitt County Horticulture on Facebook to keep up with upcoming classes, events, and get answers to your questions. Check out photos of past events. - Lorilee George