Fall Gardening

August's heat is the indication that it's time to plant the fall garden. Fall gardens can be planted with the same varieties as are used in the spring. The key to having a successful fall garden is maintaining sufficient water on the young plants.

I recommend gardeners use drip irrigation systems and soaker hoses to keep the plants watered. The root zone of young plants extends 2 to 3 inches deep, and likely will require daily watering to keep moist in August. As the plants mature, water 1 inch weekly.

Early August is the time to plant tomatoes, peppers, squash, sweet corn, peas and beans. Plant things in the cabbage family from about August 20 to the middle of September. Cabbage, broccoli, and cauliflower are actually easier to grow in the fall because temperatures have moderated by the time they are ready to produce fruit.

Before planting fall gardens, treat any weed problems that existed in the summer. Find a herbicide labeled for the crops that will be planted. For home gardens, I recommend the herbicide trifluralin, which is sold under such brand names as Treflan, Preen, and Trilin.

Insects are more of a problem in the fall than in the spring, so be vigilant. When you see them, control them by whatever method you deem appropriate.

Wild animals become more of a problem with fall gardens as other plants tend to be drying up and going to seed. A well-watered garden of young plants offers a tempting meal. Electric fencing and protective netting can help keep the wild animals from eating your plants.

Once established, fall gardens typically can grow and produce until the first frost, which in Mississippi ranges from October to December. Winter gardens, usually planted in different types of greens and English peas, can be planted when the fall garden is finished.

**Inside This Issue:**

<table>
<thead>
<tr>
<th>Events</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garden Calendar</td>
<td>3</td>
</tr>
<tr>
<td>Citrus Leafminers</td>
<td>4</td>
</tr>
<tr>
<td>Fall Weed Control</td>
<td>5</td>
</tr>
<tr>
<td>Plant Native Milkweed to Keep Monarchs Flying</td>
<td>6</td>
</tr>
<tr>
<td>Right Plant, Right Place!</td>
<td>7</td>
</tr>
<tr>
<td>Pruning Blackberries</td>
<td>8</td>
</tr>
</tbody>
</table>

**Contact Information**

Forrest County  
Phone: (601) 545-6083  
Email: mitt52@msstate.edu

George County  
Phone: (601) 947-4223  
Email: h.steede@msstate.edu

Hancock County  
Phone: (228) 467-5456  
Email: C.Stephenson@msstate.edu

Harrison County  
Phone: (228) 865-4227  
Email: tim.ray@msstate.edu

Jackson County  
Phone: (228) 769-3047  
Email: evan.ware@msstate.edu

Lamar County  
Phone: (601) 794-3910  
Email: ross@msstate.edu

Perry County  
Phone: (601) 964-3668  
Email: b.odum@msstate.edu

Pearl River County  
Phone: (601) 403-2280  
Email: eddie.smith@msstate.edu

Stone County  
Phone: (601) 928-5286  
Email: hbj4@msstate.edu

---

Eddie Smith, Ph.D., C.A., Co. Coordinator/Extension Agent  
MSU-ES Pearl River County  
Phone: (601) 403-2280  
Email: eddie.smith@msstate.edu
### Forrest County Events

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date/Time</th>
<th>Location</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pond Workshop</td>
<td>20 6:00 p.m.</td>
<td>at the Forrest County Extension Office, 952 Sullivan Dr., Hattiesburg, MS.</td>
<td>Call 601-545-6083 for more information.</td>
</tr>
</tbody>
</table>

### Hancock County Events

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date/Time</th>
<th>Location</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hancock County Master Gardener Meeting</td>
<td>8 1:30 p.m.</td>
<td>Hancock County Extension Office</td>
<td>Join our Master Gardeners for “Show and Tell”. All attendees are invited to present new tools, tips, and tricks for home horticulture.</td>
</tr>
<tr>
<td>Beneficial Insects</td>
<td>14 2:00 p.m.</td>
<td>Pass Christian Public Library</td>
<td>Insects may serve many beneficial roles in gardens including reducing pest populations and pollination. This program will aid participants in identifying beneficial insects common in coastal Mississippi as well as include information on how home gardeners can encourage populations of beneficals.</td>
</tr>
<tr>
<td>Fall Vegetable Gardening</td>
<td>21 2:00 p.m.</td>
<td>Bay St. Louis Public Library</td>
<td>This program will include discussion of vegetable gardening for the fall and winter seasons. Garden and soil preparation, variety selection, and managing insect and disease pests will be discussed. Presenter is Hancock County Extension Agent, Dr. Christian Stephenson.</td>
</tr>
<tr>
<td>Private Applicator Training</td>
<td>30 9:00 a.m. until 12:00 p.m.</td>
<td>Hancock County Extension Office, 856 Highway 90 Suite B, Bay St. Louis, MS.</td>
<td>This training is for those who own or lease property for agricultural purposes. $20 per individual. Instructed by Dr. Christian Stephenson. Please call 228-467-5456 to register by Wednesday August 28.</td>
</tr>
</tbody>
</table>

### Harrison County Events

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date/Time</th>
<th>Location</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hancock/Harrison Forestry and Wildlife Association meeting</td>
<td>7 11:00 a.m.</td>
<td>until Noon. Sherry’s Country Kitchen located at 20180 Highway 53 in Gulfport, MS.</td>
<td>All Hancock/Harrison CFWA members are welcome to attend.</td>
</tr>
<tr>
<td>Lawn and Landscape Management Workshop</td>
<td>26-27 6:00 p.m. until 9:00 p.m.</td>
<td>Tim Ray with the Harrison County Extension office will host a two-day workshop on Monday, August 26th, and landscape management practices on Tuesday, August 27th. Topics covered include: turf ID, fertilizing, proper pruning and timing, irrigation, fertilization, and problems associated with each. Drinks and snacks will be provided. This is a free event open to the public. Space is limited so registration is required by calling the Harrison County Extension office at 228-865-4227.</td>
<td></td>
</tr>
</tbody>
</table>

### Jackson County Events

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date/Time</th>
<th>Location</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jackson County Master Gardener Meeting</td>
<td>12 10:00 a.m.</td>
<td>at the Grand Bay National Estuarine Research Reserve (NERR). Topic: NERR update/opportunities.</td>
<td></td>
</tr>
</tbody>
</table>

### Lamar County Events

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date/Time</th>
<th>Location</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine Belt Beekeepers Meeting</td>
<td>1 7:00 p.m.</td>
<td>at the Lamar County Extension Office in Purvis, MS.</td>
<td></td>
</tr>
<tr>
<td>Purvis State Fall Dairy Show</td>
<td>17</td>
<td>Purvis Multipurpose Complex. Call the Lamar County Extension Service office (601-794-3910) for more information.</td>
<td></td>
</tr>
<tr>
<td>Private Pesticide Applicator Training Course</td>
<td>22 6:00 p.m.</td>
<td>at the Lamar County Extension Office Purvis, MS. Please call 601-794-3910 and RSVP. There is a $20.00 fee for the training.</td>
<td></td>
</tr>
</tbody>
</table>

### Pearl River County Events

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date/Time</th>
<th>Location</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearl River County Master Gardener Meeting</td>
<td>2 12:30 p.m.</td>
<td>Crosby Arboretum in Picayune, MS. SHOW &amp; TELL TIME. Bring your favorite tools and tell why they work for you.</td>
<td></td>
</tr>
<tr>
<td>Pearl River-Stone County Forestry Association Meeting</td>
<td>6 12:00 noon.</td>
<td>The Sawmill Restaurant, 2205 Highway 49, Wiggins, MS. Dave Godwin, Landowner Coordinator for MS Forestry Association (MFA) will be educating private timberland owners about opportunities to receive cost-share and/or technical guidance on management from the Natural Resources Conservation Service (NRCS).</td>
<td></td>
</tr>
<tr>
<td>Pearl River County Cattlemen’s Association Meeting</td>
<td>16 6:30 p.m.</td>
<td>at the Pearl River County Fairgrounds Storm Shelter. There is a $10:00 charge to help cover the cost of the meal (Kids 12 and under are free). Call 601-403-2280 to RSVP for the meeting.</td>
<td></td>
</tr>
<tr>
<td>Weed Management</td>
<td>19 11:00 a.m. until 12:00 noon</td>
<td>The Senior Center of South Pearl River County. Presenter: Alex Shook, Pearl River County Extension Agent. No RSVP required.</td>
<td></td>
</tr>
</tbody>
</table>

### Stone County Events

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date/Time</th>
<th>Location</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearl River-Stone County Forestry Association Meeting</td>
<td>6 12:00 noon.</td>
<td>The Sawmill Restaurant, 2205 Highway 49, Wiggins, MS.</td>
<td></td>
</tr>
</tbody>
</table>
Garden Calendar: August

Prepare
- Plan beds for bulbs. Order Tulips, Hyacinths, Dutch Iris, Daffodils, Narcissus, and Amaryllis.
- Prepare beds for October planting by adding compost or leaf mold.

Plant
- Plant Daylilies in a sunny location. They will be well established before winter.
- Divide and transplant Louisiana Iris, Easter Lily, Canna, Liriope, Ajuga, and Shasta Daisy.
- Mums should be planted for September bloom and fall color.
- Marigolds, Asters, Zinnias, and Celosia can be planted to replace faded annuals.
- Plant seeds of Calendula, Columbine, English Daisy, Forget-me-not, Pansy, Sweet William, and Violet.

Fertilize
- If acid loving plants including Azaleas, Camellas, and Gardenia show signs of chlorosis (yellowing of leaves), a treatment of Iron Chelate should cause leaves to regain their green color.
- Feed mums with a complete fertilizer every two weeks and water thoroughly until buds show color.

Prune
- Cut back annuals, such as Impatiens and Vinca to encourage fall blooms.
- Disbud Camellias, Dahlias, and Chrysanthemums to produce specimen blooms.
- Continue to remove dead heads in the garden to stimulate blooming.
- Cut back rose canes to 24-30 inches from ground for autumn blooms.
- Remove dead and damaged wood from trees and shrubs.

Water
- Water garden deeply, but infrequently throughout the month.
- Water early in the morning or in late afternoon. Water on leaves during the heat of the day can cause the sun to burn leaves.
- Potted plants and hanging baskets need to be watered daily.
- Make sure Azaleas and Camellias stay well watered, because they are forming flower buds for next year.

Miscellaneous
- Mow weekly and leave clippings on the lawn.
- Turn compost pile.
- Feed the birds.

In Bloom
Citrus Leafminers

I’m often asked about leaves curling up on citrus trees, and most often, this is caused by leafminers. Citrus leafminers are a relatively new pest of citrus trees, which are often grown as landscape trees in the southern portion of the state. Originating in Asia, the citrus leafminer was first discovered in Florida in 1993. These small moths rapidly became a significant pest, with infestation rates of up to 90% in some areas in Florida being observed within the year of introduction. By 1995, the citrus leafminer was discovered in Texas, Central America, western Mexico, Caribbean islands and by 2000, it arrived in southern California.

Citrus leafminers are the larvae of small moths. They cause long, winding mines or trails in the leaves of many types of citrus trees. Because this insect is newly introduced, it has few natural enemies, and infestations are often heavy. Leafminers are one-fourth inch long or less. The term leafminer describes any insect that completes at least a portion of its life by living and feeding inside plant leaves.

Damage is caused by the larvae. In most cases, the larvae feed on the leaf tissue between the upper and lower epidermis of the leaf. It destroys leaf tissue by mining in the leaf, reducing leaf area and interfering with nutrient translocation. Extremely heavy infestations can result in enough loss of leaf area to adversely affect plant vigor and health. Fortunately, this is not common, and most leafminer infestations do not seriously affect plant health and may not require treatment. However, even light leafminer infestations can cause plants to be unsightly, and damage may persist. This aesthetic injury is the primary damage leafminers cause.

Because the larvae live in a protected location inside the leaves, leafminers can be difficult to control. Systemic insecticides work best to control leafminers. Products containing the active ingredient spinosad are especially useful against citrus leafminers, as well as other larval-type insects. Some formulations of spinosad are specifically labeled for use on home-grown citrus and approved for organic use. Insecticide products containing acephate or imidacloprid are normally most effective on leafminers in the landscape and more specifically on boxwoods, hollies, and azaleas, although many spinosad products carry this label as well. Because citrus trees are grown both as landscape plants and food crops, it is important to be sure any insecticides are specifically labeled for that use. Please read and follow all label directions.

Severe citrus leafminer damage causes leaves to curl.

Distinct trails in the leaf caused by the citrus leafminer.

Adult citrus leafminer moth, Phyllocnistis citrella
Fall Weed Control

Control of winter annual weeds begins towards the end of summer and beginning of fall. Preemergence herbicides need to be applied in late-August or early September to prevent these annual winter weeds from becoming an issue. To be effective, pre-emergence herbicides must be applied before weeds emerge. To be effective, they must be applied before weed seed germination. These herbicides require 0.25 to 0.5 inches of rainfall or irrigation for activation so try to time the application within a day or two or expected rainfall, but not a torrential downpour where all of the product ends up being washed away. All of the herbicides in this list can be used on established, southern turfgrasses. READ, and FOLLOW, THE LABEL completely to make sure you can use it in your situation.

A partial list of common (active ingredient) and trade names for Pre-emergent Weed Control in Home Lawns by Homeowners can be found below. Just as with an application of fertilizer, going in two different directions that total the labeled rate will provide a more consistent barrier to emerging weeds rather than an application in one single direction. Depending upon label directions and application restrictions for the particular product you purchase, reapplication may be beneficial in 6-8 weeks. It is not recommended you use a product that contains a fertilizer carrier at this time as the turf is getting prepared for winter dormancy and encouraging a flush of growth can be detrimental.

Common Name – Trade Name (partial list)
1. dithiopyr - Sta-Green Crab Ex; Green Light Crabgrass Preventer; Vigoro Preemergent Crabgrass and Weed Preventer
2. pendimethalin - Scotts Halts Crabgrass Preventer
3. oryzalin - Southern Ag. Surflan A.S.
4. isoxaben - Portrait Broadleaf Weed Preventer
5. benefin + oryzalin - Green Light Amaze Grass and Weed Preventer; XL 2G
6. benefin + trifluralin - Hi-Yield Crabgrass Preventer; Southern Ag. Team 2 G
7. corn gluten meal - Concern All Natural Weed Preventer Plus; Nature’s Guide Corn Gluten Meal
Plant Native Milkweed to Keep Monarchs Flying

The monarch butterfly is a beautiful visitor to coastal Mississippi, passing through on its migratory path from Canada to Mexico. Monarch butterfly populations have fluctuated over the past few decades, with weather patterns, deforestation, and loss of habitat the primary causes for lower numbers. Adult monarch butterflies feed from a variety of nectar sources, but caterpillars feed only on milkweed.

Growing milkweed in gardens and backyards is a great way to both support the populations of monarch butterflies and to enjoy them in your home landscape. There are many species of milkweed, and despite the best intentions, some types of milkweed have been planted by conservation groups and gardeners that can interrupt the natural migration of the butterflies. The most common type of milkweed planted was *Asclepius curassivica*, also known as tropical milkweed. This type of milkweed stays green through cold weather and continues to produce new leaves through the fall and into the winter months. This leads to monarchs remaining where the food is rather than continuing their migration.

The continued presence of milkweed has led to some butterflies remaining in the southern U.S. and breeding here rather than in Mexico. Unfortunately, monarch butterflies that do not migrate are more likely to be affected by a disease which leads to wing deformities, smaller size, and shorter lifespan. Long range migration helps reduce disease in monarch populations as infected individuals fail to make the difficult journey or the butterflies move away from areas where disease organisms are present.

Home gardeners can help monarch butterflies first by removing any tropical milkweed planted, and then by replacing it with one or more of the fifteen milkweed species native to Mississippi. *Asclepius tuberosa*, or butterfly weed, is possibly the most well-known type for gardeners. However, other species of milkweed also make great additions to the home landscape and are becoming more common at nurseries due to consumer interest. Most types of milkweed flower from late spring to early summer, however, some such as fewflower milkweed, *A. lanceolata*, continue to bloom through the heat. Different species of milkweed also offer color choices with Michaux’s milkweed having greenish-yellow petals with purple markings, while swamp milkweed and white milkweed offer white flowers.

Including milkweed and other plants favored by butterflies adds beauty to the home landscape while also helping to conserve our natural heritage. Being sure to plant species and varieties that will be of benefit to butterflies will ensure that their populations thrive, and we can continue to enjoy their presence for years to come.
Right Plant, Right Place!

Many home landscape issues can be solved by planting the right plant in the right place. A plant that is happy and healthy is more likely to outgrow any pest or disease issues that may arise. Why might you be thinking about landscape plans now? Autumn is one of the best times to plant herbaceous perennials, shrubs, and ornamental trees in the garden. Planting in fall gives plants time to establish in the landscape and develop a good root system before the stress of summer heat. To be ready for fall planting, now is a great time to start doing some research. While you’re at it, why not send in a soil sample to the soil testing lab? Sometimes it is beneficial to work with what you have – if you have acidic soil, it might be easier and cheaper to plant acid-loving plants instead of having to lime your soil regularly. Soil test results are a very useful tool to aid in plant selection.

There are several important characteristics to research in order to find the best plants for your landscape. Choose a plant that will grow in your hardiness zone, which can be found on the USDA Plant Hardiness Zone Map. These zones are based on the average minimum winter temperatures and can help determine if a plant is fit for your climate (most of our area is zone 8).

Mature size of a plant is important to consider as well. Sometimes it is easy to miss how large a plant will grow to be when you see it in a small container at the time of purchase. Choosing a plant of the correct size can save you many hours of pruning, especially if plants that are too large are planted in front of windows or too close to your house. Space plants accordingly so they have room to grow, or they may shade each other out and decrease air circulation, which increases the likelihood of pest or disease problems. Knowing a plant’s mature size before putting it in the ground can also save you the cost of removing it from your landscape in the future, which gets more expensive the larger a shrub or tree gets. It’s always a good idea to group plants with similar water, fertility, and light requirements in the same area so their needs can be met together. Soil texture also plays a part in what plants will succeed in your garden since some plants are tolerant of many soil types, while others do better in a specific type. Be sure to analyze your site at different times so you know how much light the area receives throughout the day. If you choose a shade-loving plant because you have a spot in your yard that is shady in the morning, it may not be the best fit if the same area gets full afternoon sun.

Regardless of what plants will do well in your landscape, think about how you want to use your property. Do you want a lawn area for recreational purposes? If that’s the case, better not plant a large shade tree nearby that will eventually grow and shade out the lawn. Next time you add to your landscape, don’t forget to plant the right plant in the right place. Choose plants that will grow well in your home garden but that will also meet your needs of the space and your maintenance preferences.
Growing blackberries at home is an easy way to enjoy these delicious fruits without having to venture out into forested areas to collect them. Without looking very far, home gardeners can find improved varieties with assorted berry sizes, disease resistance, and thorny/thornless plants depending on their preference. Another added benefit of maintaining your own blackberries is the harvest, being able to manage the ground around the canes mean you are less likely to encounter poisonous plants or insect pest such as ticks. The key to taking advantage of this relative ease of harvest is understanding the biennial growth of the canes and managing the growth of the canes both vertically and horizontally. If left unkept the blackberry plants will begin to form a thicket and resemble their native counterparts in just a few growing seasons.

Blackberry canes are biennial, meaning that each cane will grow for one year and be fruitless. The following year it will produce fruit and die back. If you are planting blackberries in the early spring, make sure to train trellising varieties and keep erect varieties in a row. These will be your fruiting canes next year. The new growth in the 2nd and subsequent years will produce fruit the following year. However, it is recommended that these new canes be topped at about 3 feet. This encourages lateral growth and makes harvest easier since the berries will be within reach. Following harvest in the summer, fruiting canes need to be removed to avoid an over abundance of unproductive plant material. This can be done by hand pruning them with clippers or mowing. Keep in mind mowing has the potential to weaken the plant and must be done with adequate growing season left to grow back the vegetative canes.

Lastly, as the blackberries grow they may begin to close in the gaps between rows. Routine mowing in this space will reduce suckers and allow easy access to the plants for harvest, fertilization, and other management activities.