



Starting Transplants

Starting your own transplants from seeds can be a lot of fun and is probably much easier than you might imagine. In many situations, one or two propagation flats for growing transplants are enough to stock the vegetable garden with nearly all the vegetables a small family will need. All the "stuff" you need to get started may be found at your local garden center.

There are many types of containers that can be used to start seeds. Egg cartons, plastic food containers, styrofoam cups, etc. With any container used, the seeds must be started in a well-drained, well-aerated, sterile soilless media. A wide variety of commercial and homemade soilless mixtures are suitable.

My favorite is a small, rectangular tray that comes complete with a plastic lid and compressed soil pellets. This package sells for less than ten dollars. The tray holds the pellets that substitute for loose soil. The clear plastic lid is used to maintain a moist environment, retain heat and protect young seedlings from the wind. The tray is designed so that each soil pellet has its own compartment to insure adequate spacing. This unit is also very portable so that it can be brought inside if freezing weather threatens.

Vegetables such as broccoli, cabbage, kale, tomatoes, peppers, eggplant, lettuce, onions, and sweet potatoes can be started in containers and transplant easily into the garden. Beans, corn, and carrots do not do well as transplants and should be planted directly from seed into the garden.



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Soil Compaction

Soil compaction is a common problem leading to the decline of trees in home landscapes and urban environments. Soil compaction can be caused by heavy machinery used in home construction, routinely driving or parking vehicles in an area, or by excess water. When soils are compacted, the air spaces necessary for plants to respire are eliminated, potentially leading to decline. Lack of pore spaces can also dramatically slow the infiltration of water. In addition, roots have a difficult time moving through heavily compacted soils, leading to shallow rooted plants that are more prone to drought stress and nutrient deficiencies. Compaction is more common in heavy clay soils but can affect sandy soils as well, particularly when heavy equipment is being used.

Like many problems in the home landscape, for soil compaction, an ounce of prevention is worth a pound of cure. Reducing traffic around trees and other plantings in the landscape will assist in preventing the soil becoming compacted. In addition, mulches can help to reduce the potential for soils to become compacted. The addition of organic matter reduces compaction while also increasing the water holding capacity of the soil. Organic matter can be introduced by tilling or by spreading it over the top of the soil. When tilling in organic matter, a two-inch layer is sufficient to improve the top six inches of the soil. When spreading organic matter over the top of soil, no more than one inch should be added at one time.

A simple test to determine if your soil is compacted is to attempt to press a knife or screwdriver into the soil when it is wet but not completely saturated. The knife should be able to easily be pushed into the soil using just your thumb and forefinger. If not, your soil is likely compacted.

In situations where the soil has become compacted, there are several potential ways to address the problem. One method that should be avoided is the addition of sand to clay soils. The mixture of sand and clay can become almost as hard and difficult to work with as concrete. Tilling breaks up the soil and creates more air spaces, also allowing water to more easily penetrate to the root zones of plants. While deep tilling is possible, it is difficult to do in the home landscape and would be damaging to any existing plantings. Over-tilling should be avoided as it can lead to more compaction. Soil should have pea-sized aggregates that allow for air and water penetration. In grass areas of the landscape, plug aeration can be used. Plug aeration removes small cores of soil making room for increased pore spaces. Air tilling can be used around trees and works by injecting high pressure air into the soil to loosen it. Finally, in areas such as vegetable gardens, cover crops like radishes or rye grass can be grown and tilled in prior to planting the main crop. Roots of the cover crop will penetrate and break up the soil while also integrating organic matter.



Severely compacted soil a common cause of decline in urban trees



Plug Aeration



Radish cover crop

Garden Calendar: April

Planting

- Divide Violets, Shasta Daisies, Liriope, Ajuga, Mums and other Perennials.
- Plant Okra, Melons, Peas, Corn, Beans, Eggplant, Cucumbers, and Tomatoes.
- Set out Basil.
- Set out summer annuals if danger of frost is past: Ageratum, Allysum, Begonias, Geraniums, Dianthus, Celosia, Marigolds, Moss Rose, Petunias, Impatiens, Coleus, and Caladiums.
- Plant summer and fall blooming bulbs: Callas, Cannas, Dahlias, Gladiolus, and Gloriosa Lilies.
- Sow Zinnias for early summer blooms.



Fertilizing

- Fertilize Tomatoes with 10-10-10



Pruning

- Remove any freeze-damaged and dead wood.
- Prune Azaleas during or after blooming. Remove faded flowers from Kurume Azaleas.
- Prune flowering shrubs after they finish blooming. If pruning can be done while the shrub is flowering, the trimmed off parts can be brought indoors for floral displays.
- Disbud roses and peonies for specimen flowers.

Mulch

- Always mulch in new plantings to help assure success.



Miscellaneous

- National Arbor Day is the fourth Friday of April.
- Paint and repair garden furniture and other hard construction (bird bath, bird houses, mailbox, deck, etc.).
- Buy Azaleas in bloom to be sure of color.





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The Importance of Chilling Hour Requirements of Fruit Trees

Knowing chilling hour requirements when purchasing fruit trees can be the difference between failure and success. The dormant buds of many plants require a period of cold weather to grow, flower, and develop properly. For dormant buds of fruit trees, this is commonly referred to as the chilling requirement. Chilling hours are defined as the period of time between 32° F and 45° F; however, at temperatures below 32°F, generally no chilling is accumulated. Once the adequate number of chilling hours has been reached and temperatures warm, the plant will be ready to break dormancy, and buds will begin to grow, and the plant will flower. For this reason it is important to choose varieties that have similar chilling requirements as what is received at your location. This will ensure in most years adequate chilling is achieved and that plants do not come out of dormancy before the winter is over.



Different crops require a different amount of chilling hours before they are ready to break dormancy. Plants are assigned a certain chilling requirement based on the amount of cold needed to cause 50 percent of the buds to break and flower in the spring. Most blueberries have a chilling requirement of 400-600 hours. Peaches are planted using the chilling requirement as a criterion for variety selection and range from a low of less than 400 to a high of 1250. For example: a very popular peach variety called Redhaven has a chilling requirement of around 950 hours. The average chilling hours during the winter in and below Hattiesburg are 400-600. Therefore, a different variety selection would be more beneficial for south Mississippi.

Planting a variety that requires more chilling hours than what is accumulated on average often results in delayed to no bloom, reduced fruit set, and/or reduced fruit quality. Cold damage to emerged buds is common when low chill varieties are planted in an area that receives medium to high chilling hours on average. For example: A peach variety with a 300 chilling hour requirement planted in a place with 700 average chilling hours is likely to break bud if an unseasonal warm spell occurs once the 300 hours have been met. However there is still likely to be 400 more hours of cold temperatures for that location! This peach variety is likely to experience cold damage to blooms in most years. For a list of fruit and nut trees for your location in Mississippi, refer to Publication 966: *Fruit & Nut Recommendations for Mississippi* on the MSU Extension website.

Knowing your area's chilling hour requirements when choosing fruit varieties can prevent serious impacts to plant growth when chilling hours are accumulated during the dormant period. Chilling hours are calculated as a tool for fruit producers to gauge whether their crop has been exposed to cold temperatures for a long enough time period. Dr. Eric Stafne, Fruit and Nut Specialist with Mississippi State University Extension, developed an app updating current Chill Hours for IOS or Android that can be found at https://webapps.msucare.com/chill_hours/. For more information, please contact your local Extension office.

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Henbit

As we move into spring you may start to notice patches of green broadleaf weeds popping up and becoming more noticeable in dormant warm season grass sods. One of the more common of these is a cool-season annual weed named henbit, which germinated in the fall and continues to grow through the spring. This pesky weed can be identified with its rounded or triangular leaves with rounded lobes, greenish to purple square stems, and when in bloom it has tiny bright pink or purple flowers with long necks. The seeds of henbit are rather small, but can number over 2,000 per plant. The prolific seed production of henbit enables it to establish in a lawn after just a few seasons if not controlled. As such, being able to identify and treat isolated areas is key to saving yourself headaches down the road.

Maintaining an optimal mowing height in combination with fertilization and irrigation as needed will promote a healthy lawn that will exclude open ground for weeds to establish. However, weeds like henbit can still find their way into shaded areas or borders where our common warm-season grasses don't grow as well. The use of fall applied pre-emergent herbicides is a good measure to prevent weed seeds from germinating when temperatures become optimal. Applications of pre-emergent herbicides after henbit has germinated may result in poor control. Once henbit has germinated, post emergent applications of products such as Trimec, a 3 way blend of broadleaf specific herbicides, will yield better results. When applying these herbicides, be sure to follow the label for mixing and application instructions. Additionally, applications made after henbit has flowered will control the plant, but any seeds already made may require subsequent applications the following year.



Event:
There will be a Spring Gardening Workshop at 5:30 p.m. on April 11th at the Forrest County Extension Office, 952 Sullivan Dr., Hattiesburg. To RSVP please call 601-545-6083.



Pearl River County
Master Gardeners
Spring Garden Clinic



April 2, 2022



8:00 a.m. until 1:00 p.m.
Crossroads Feed & Seed
3854 Highway 26 West
Poplarville, MS 39470



Extending
knowledge.

Changing
lives.



27th Annual
Landscape Symposium

April 23, 2022

The Venue at 7L Farms
853 Oil Well Road
Wiggins, MS 39577

Program 8:30 am – 3:00 pm

Topics Include:
Bonsai
Trees in the Home Landscape
Seed Starting and Propagation
Floral Design

Registration is \$10.00
(Lunch Included)

There will be a Vegetable and Plant Sale, A Raffle and Door Prizes

For more information
Call (601) 928-5286

Sponsored by:
Mississippi State University Extension Service
Stone County Master Gardeners

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Events

Teacher's Conservation Workshop

If you wanted to teach everything about your profession to a group of school teachers, could you do it in just a single week? That's the mission of the Teacher's Conservation Workshop (TCW). For over 50 years, the TCW has been "bringing the outdoors into the classroom" with active, engaging, and enjoyable activities designed to expose teachers to all aspects of the outdoors, forestry, and of course, conservation.

In the decades that the Mississippi Forestry Association has been sponsoring this workshop thousands of educators have taken advantage of this opportunity to gain insight into one of Mississippi's most important industries: forestry. With over 65% of our state forested, timber generates over \$1 Billion annually in MS. It's vitally important that teachers have an understanding of this industry and the role it plays in all our lives.

The TCW lasts just one week, and in that time, the participating teachers engage in presentations from foresters, landowners, wildlife biologists, and other natural resource professionals. Most of the week, however, is spent outdoors. There are field trips each day to tree nurseries, private and public forests, active logging operations, sawmills, and many other locations. Everything is hands on and designed with two things in mind: learning about forestry and having fun while doing it. At the end of the week, teachers leave with dozens of lesson plans that are adaptable to almost any subject and any grade level. Two week-long workshops are held each year in Hattiesburg (June 5-10), and Booneville (June 19-24). A shorter version of the workshop is held in Jackson and takes place over just three days (July 12-14).

In addition to the knowledge gained, participating teachers also receive 5.0 continuing education credits (CEUs). The course can also be taken for academic credit towards a degree in education. The cost for this workshop is only \$150, and there are many scholarships available, so most teachers end up having to pay nothing out of pocket. For more information, check out <https://www.msforestry.net/page/TCW> or email Butch Bailey at Butch.Bailey@MSState.edu.

Online Private Applicator Certification Program

A private applicator is a certified applicator who uses or supervises the use of restricted-use pesticides to produce an agricultural commodity on his or her own land, leased land, or rented land or on the lands of his or her employer. Private applicators must be at least 18 years old.

In response to limited face-to-face training during the COVID-19 situation, the Mississippi Department of Agriculture–Bureau of Plant Industry has approved an online private applicator certification program developed by the MSU Extension Service. Persons needing to obtain or renew their private applicator certification can complete the online training (two video training modules and a competency exam) by using the following link: <http://extension.msstate.edu/content/online-private-applicator-certification-program>. The fee for training and testing is \$20, payable online by credit card, debit card, or eCheck.



MISSISSIPPI STATE UNIVERSITY...
EXTENSION

**Private
Applicator**
TRAINING AND TESTING ONLINE

Watch the training modules, pass the exam, and receive your private applicator certification from MDAC Bureau of Plant Industry.

\$20 COST

Visit <http://msuext.ms/agmes>
or contact your local MSU Extension office for info on how to register.



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Termites

Termites are active 365 days a year, but we tend to be more mindful of them in the spring because this is when they swarm. Having large numbers of termite swarmers emerge inside a building is a sure sign the building is infested and needs to be professionally treated. It is also a good idea to be alert for signs of termite infestation when doing home repairs or maintenance or when working in flower beds around the foundation of a building. It is even more important to know when your house was last treated for termites.

Swarming termites are attracted to light at night. In the spring when termites are swarming, you can prevent attracting the swarms by turning off external lights around your home. Limiting the internal lights will also help keep the swarming termites from trying to enter your home.

If you don't have an active termite contract on your home or at least have a record of when the house was last treated, it is probably time to have the house treated. See Extension publication 2568, *Protect Your House from Termites*, for information on how to recognize signs of termite infestation and for answers to common questions about termite treatments.



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Cogongrass

When you are driving on the road in the next few weeks, keep an eye out for white feathery plants in the ditches. This noxious weed called (Cogongrass) is a major problem in southeast Mississippi. Cogongrass has no nutritional benefits and is detrimental to forage crops and hinders the growth of timber.

Cogongrass is most commonly seen in pastures/hayfields, wooded areas and roadsides. The easiest time to identify the weed is now when it's blooming and in the winter while it is dormant. Now of course it can be identified by the white feathery-like seed heads. It also typically grows in a large circle, and during the winter it has a color that is different from surrounding grasses.



The most effective form of treatment is through the use of herbicides. The use of Roundup (Glyphosate) or Arsenal (Imazapyr) solution twice a year where cogongrass has surfaced seems to be the most effective. These products can be found in many different brand names but the active ingredient of (Glyphosate) or (Imazapyr) is what you should seek. The first of those two applications should be a spray mix containing 0.6 fluid ounces of herbicide per gallon of water, which should be applied just before flowering starts in late April or early May.

The second spray should be a heavier dose applied in September or October four to six weeks before the first frost with a spray mixture that contains 2.6 fluid ounces per gallon of Roundup or 1.3 fluid ounces per gallon of Arsenal. There is more flexibility if you're using Arsenal, in terms of when that application can be made. The downside of using Arsenal is if you have hardwood vegetation close to the treatment zone, you may kill the hardwoods. It won't damage pine trees, but it can hurt hardwoods.

There has never been a major concern that the cogongrass may invade agronomic crops, such as cotton, corn, peanut or soybean. Rather, the greatest threat is for no-till crops, such as timber, pecans and blueberries. Cogongrass is a major problem in areas where there is little to no soil disturbance. If you are vigilant in fighting cogongrass with herbicides you can usually gain effective control on your property but this will be an ongoing battle.