



Planning Your Future Garden

Whether you are an experienced gardener, or plan to plant your first this year, adequate preparation is key. Today I am going to present steps you can take now for a successful future.

By creating a gardening plan before purchasing, you can set realistic goals and not overspend on unnecessary items. Begin by choosing the plants you want. For extra fun and challenge, consider new plants or plant varieties. For example, heirloom flower and vegetable varieties offer a unique assortment of colors and flavors. Do keep in mind this tends to be at the expense of pest and disease resistance. Another option is to integrate sustainable methods into your garden, such as the use of composting or chemical pesticide alternatives. Once you have an idea, determine the number of needed seed packets, and purchase your seeds. This guarantees even if there is a later shortage of a certain variety, you will still have the seeds you want. It also ensures you have sufficient time to start seeds before transplanting, if necessary. Seeds can be purchased through a garden center, a seed catalog, or online. Store seed display racks have reliable standard seeds but likely won't have specialty varieties. Catalogs offer a wide arrange of seed varieties and allow the purchase of varieties that ripen at differing times. Planting this way spaces out your garden's harvest over a longer period of time. Online seed sources have a wide selection and provide an indication of whether the seed is currently available. Online options will also have the most newly obtainable varieties.



Heirloom Tomatoes

Apart from the plants themselves, there are other essential gardening considerations. Purchase necessary potting mix and fertilizer to ensure an adequate supply at time of use. Now is also a good time to inspect tools for rust and clean as needed. You can prevent future rust by placing a light coat of mineral oil or used motor oil on tool heads. Make sure you have an ample number of working gloves (your hands will thank you later). Mechanic gloves are best suited for when you need the holding power, while latex or nitrile coated cotton gloves are helpful for when your hands will get wet. Begin recording this year's gardening plans in a notebook or online, which will assist with making informed decisions in the following years.



No matter what your plans are for this year, the Extension Service is here to help. Search the Extension website, or contact your County's Extension Agent, to find the advice you need. For more information on choosing what vegetable varieties to plant, see Extension Publication 3744, *Variety Recommendations for Mississippi Vegetable Gardens*.

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Reflect and Make Plans for New Gardening Year

Happy New Year! As we embark on a new year, gardeners and plant enthusiasts alike are gearing up for a fresh season of growth, color and the promise of a bountiful harvest.

Whether you're a seasoned green-thumb gardener or a novice with dreams of a flourishing garden, the new year is the perfect time to sow the seeds of your botanical aspirations. Let's explore essential tips and resolutions to help you cultivate a vibrant and thriving garden in the coming months.

Before you plunge hands first into the soil, take a moment to reflect on your successes and challenges of the past growing season. Consider what worked well and what could be improved.

Use this reflection as a foundation for your gardening resolutions and plans for the new year.

What do you hope to achieve with your garden this year? Whether it's enhancing curb appeal, growing your own vegetables, creating a haven for pollinators or simply enjoying a more colorful landscape, clearly define your goals. Setting specific objectives will guide your plant choices and gardening activities.

I always like to make the new year an opportunity to diversify my garden.

If you feel like trying something new, explore new plant varieties, colors and textures to add interest and complexity to your outdoor space. Consider incorporating native plants that are well-suited to your region. This promotes biodiversity and supports the local ecosystems.

Another preparation to make is to develop a planting calendar tailored to your local climate and growing zone.

Research the optimal times for planting different types of plants, considering frost dates, temperature fluctuations and seasonal changes. This strategic approach makes it possible for you to create a garden that remains in a constant state of bloom and productivity.

Healthy soil is the foundation for a thriving garden; be sure to conduct a soil test to assess its composition and nutrient levels.

Based on the results, amend your soil with nutrients and organic matter such as compost or well-rotted manure. Healthy soil provides the necessary nutrients and structure for plants to flourish.

Consider making a commitment to incorporate some sustainable practices in your garden. You can reduce your environmental footprint by composting kitchen and garden waste, using organic fertilizers or minimizing the use of chemical pesticides.

These steps can help you create a garden that not only flourishes aesthetically but also harmonizes with the natural ecosystem.

Gardening is a journey of continuous learning. Dedicate time to expand your horticultural knowledge through books, online resources and local gardening events. Stay informed about new gardening techniques, plant varieties and sustainable practices. This allows you to evolve as a knowledgeable and skilled gardener.

Remember the Mississippi State University Extension Service has offices in every county and staff to assist you in becoming a successful gardener. Visit your local Extension office to see what resources are available to you.

I truly believe that with thoughtful planning, sustainable practices and a spirit of continuous learning, you'll cultivate a garden that not only thrives in the new year but also brings joy and fulfillment every season. Happy gardening!



Garden Calendar: February



Planning

- Decide on plants you would like to have in your spring garden and flower beds.
- Consider buying new plants that you have not tried before.
- Determine how many seed packets you need. Remember to order extra seed if you are planning to replant for a second crop of flowers after the heat of the summer.

Planting

- Plant cold weather annuals: Nasturtiums, Pansies, Snapdragons, English Daisies, Sweet William, and Calendulas
- Start cold weather vegetables in cold frame: Broccoli, Cauliflower, Onion sets, English Peas, Kale, Carrots, Collards, Beets, Radishes, Kohlrabi, and Chinese Cabbage.
- Plant Asparagus in prepared beds.
- Start seeds of Herbs indoors for transplant outdoors.
- February is an ideal time to set out Dogwoods. Planting site should be well drained and plants should be planted shallowly. Dogwoods prefer acidic soil.
- Broad-leaved Evergreens such as Magnolia, Holly, and Photinia can be set out at this time.
- Plant new Roses, or move old Roses soon after February 15.

Fertilizing

- Roses -- Apply top-dressing of organic fertilizer under thick layer of compost or rotted manure.
- Fertilize Trees and Shrubs (not spring Flowering Shrubs) if not fertilized in January.

Pest Control

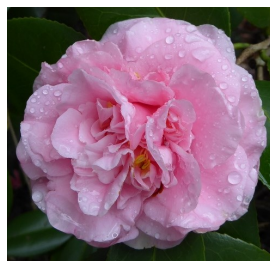
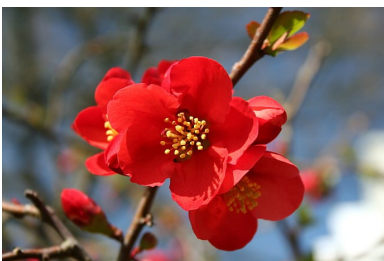
- Spray garden with dormant spray. This will kill many eggs and spores of insects and diseases. Do not apply if temperatures will dip below freezing within 4 hours of application.

Pruning

- Prune Evergreens for size and shape. Cut out dead wood of Flowering Shrubs. Dispose of clippings to prevent disease or insect spread.
- Prune Hydrangeas during the last week in the month.

In Bloom

- Crocus, early Daffodils, Helleborus, Hyacinth, Pansies, Scilla, Snowdrop, Snowflake, Violet, Camellia, Forsythia, Flowering Quince, Loropetalum, Pussy Willow, Thumbergia Spirea, and Winter Jasmine.





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PRUNE, PRUNE, PRUNE

We are inching closer and closer to that warmer weather. I begin itching to get outside and do some gardening and clean up old or dead foliage. The best place to start this process is getting that pruning equipment sharp and clean. Late February is the time to prune broadleaf and narrowleaf evergreens or deciduous plants. Make sure to know your plant type before pruning. Make sure to prune after flowering. If the plants have colorful berries, make sure to prune them after the berries are gone. Some pruning methods you can use are tip-pruning, thinning, shearing, and rejuvenation.

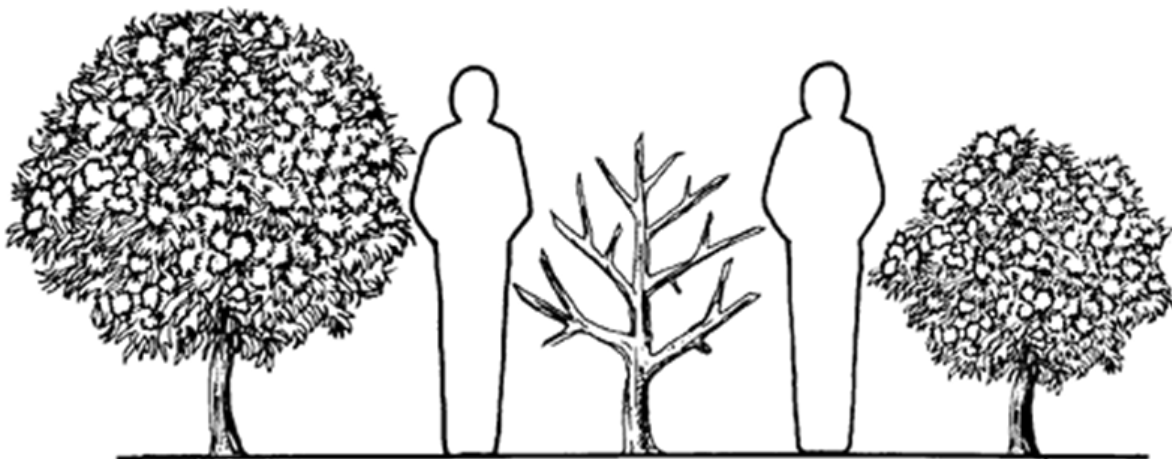
Tip-pruning will help encourage thick new growth which should result in a bushy plant. With tip-pruning you will only remove the first few inches of stem tips.

Thinning is used on broadleaf, deciduous landscape to help encourage flowering and strong growth. This should be done before the new growth occurs and should be done by removing older or weaker branches all the way back to the lateral branch or completely to the ground.

Shearing will have you clipping the newest foliage which is usually 1 to 2 inches of new growth. This helps with shaping and regulating the size of shrubs. This will help promote thick, dense foliage.

Finally, rejuvenation is severe pruning which most people are cautious of doing. This only needs to be done on broadleaf evergreens and deciduous plants that have become overgrown, leggy, and straggly plants.

For more information and details on how to prune and proper equipment to use please go to MSU Extension webpage for publication #IS0204 "[Pruning Landscape Plants](#)" or contact your local Extension Office.



Before pruning | after pruning | new growth following severe pruning



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Organic vs. Inorganic Gardening

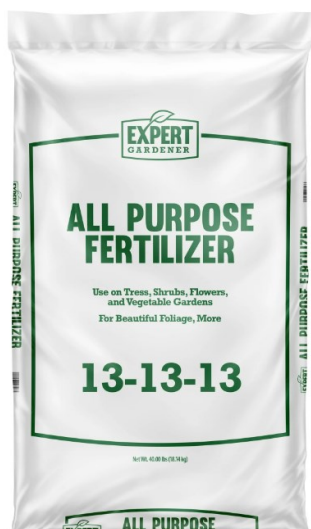
Let's face it, interest in organic gardening is increasing with much of the interest directed towards reducing or eliminating the use of conventional pesticides for controlling insects and diseases and/or eliminating the use of synthetic fertilizers. There are now many products in grocery stores labeled organic and people buy them, regardless of their increased price tag. Many claim that eating organically grown foods is much healthier than eating foods produced using conventional methods although there have been scientific studies contradict such claims. To the contrary, there have been studies showing no difference in healthiness, taste, and environmental sustainability between the two methods. To be honest, it doesn't matter which method you prefer, it's your choice as an individual, both methods can work, and both methods can be sustainable. But there are trade-offs when it comes to organic gardening.

Organic gardening in south Mississippi faces some serious problems with severe insect and disease pressures on vegetable plants. There are many effective conventional insecticides and fungicides but controlling diseases and insects by natural means alone is difficult. There are several insecticides available including Bt and spinosad formulations for caterpillar or larval control or pyrethrum for other insects, but disease control is difficult. Neem oil, bicarbonate, and copper- and sulfur-based fungicides provide some protection against diseases, but the best results for disease management come from selecting resistant varieties and proper timing and spacing during planting. For these reasons, organic gardening is easier on a small scale. Hand-picking insects, protecting natural predators such as ladybugs and assassin bugs and incorporating insect resistant plants such as chrysanthemums could help with insect control. Removing dead or diseased plant tissue, using healthy transplants, and watering in the morning will aid in disease management for both methods of gardening.

Organic fertilizers such as manures, compost, or bone meal are derived directly from plant or animal sources and usually contain plant nutrients in low concentrations. Many of these nutrients must be converted into inorganic forms by soil bacteria and fungi before plants can use them, so they typically are more slowly released, especially during cold weather. They improve water movement into the soil and, in time, add structure to the soil. Organics feed beneficial microbes, making the soil easier to work. But they may cost more than inorganic fertilizers and are more difficult to apply because they are less concentrated,

supplying fewer nutrients pound for pound. Fresh, non-composted manure can damage your plants as well because some manure contains harmful amounts of salts and may be a source of weed seeds. If manure from grazing land is used, herbicide residue may harm garden plants.

Conventional fertilizers are cheaper per pound and usually contain only a few nutrients – generally nitrogen, phosphorus, potassium, sulfur and sometimes micronutrients, either singly or in combination. These nutrients are in a form readily available to plants and are available in slow-release form. Our soils in Mississippi rarely lack micronutrients so it's often unnecessary to apply them.



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Organic vs. Inorganic Gardening - Continued

Too often the word sustainable is used synonymously with organic gardening while both methods have the potential to be sustainable. Sustainable can be described as the use of a resource in such a way that it does not harm the environment, is economically viable, and is socially responsible. Both methods can incorporate wise water-use practices, add organic matter to improve soil health, etc. But, one must also keep in mind, whether you do organic or conventional gardening, it doesn't mean pesticide free. All the previously-mentioned products are, indeed, chemicals used to control pests and are as safe as the user's ability to apply them correctly. It's the way they are used that can make a difference on the environment. Reading and following label directions, applying no more than recommended, and applying products targeted at specific insect or disease pests are three important components in successful gardening and protecting the environment for generations to come.

Some of the Beneficial Insects Found in the Garden



Convergent Lady Beetle



Assassin Bug



Praying Mantis



Green Lacewing

Private Applicator Certification Training

MSU Extension is offering the PAT online. Since May, 2020, this program individuals from all 82 counties have (re)certified through the program. Go to <https://myaccount.extension.msstate.edu/> and select Register through the MSU Canvas Portal. Fill in all required fields including personal information, physical address, mailing address, and password for your account. After all required fields are filled with your information, select **Sign UP**. You will receive an email with instructions to finish setting up your account.

The MSU Extension Service conducts courses of training for private pesticide applicators wishing to obtain certification. A private applicator is defined as an individual who is at least 18 years of age and who is producing an agricultural commodity on his/her land or on rented land.

For those needing a private applicator license and do not want to take it online, please contact you local Extension office.

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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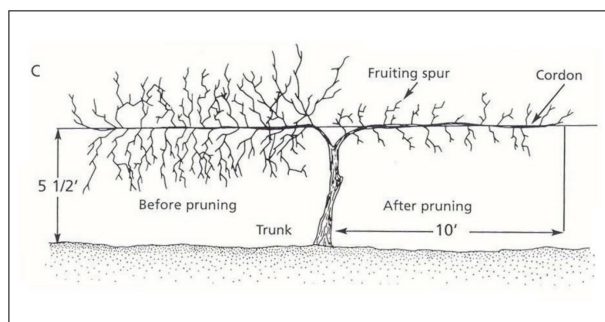
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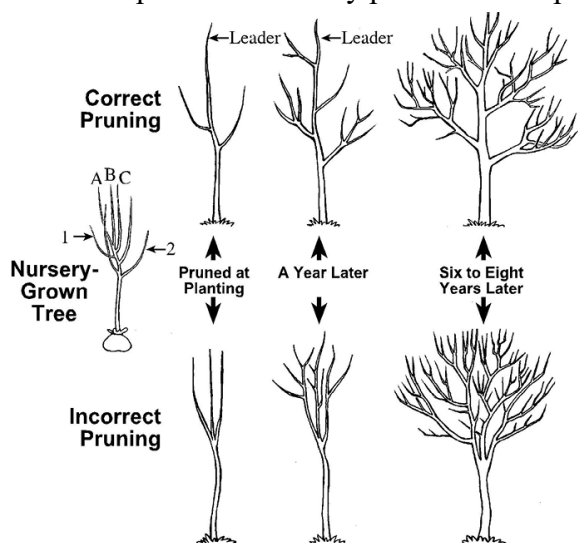
Pruning Grapes, Muscadines, & Fruit Trees

We usually have a long window of opportunity to do many of our winter chores and we can usually find a good day to suit our comfort level from late December through early March. With most of our perennials in dormancy, now is a great time to start thinking about our pruning needs and preparing for pruning our landscape plants during Jan or February. We recommend waiting until the entire plant is dormant before doing any major pruning, as this can cause unwanted stress to the plant or even cause a flush of new growth, which can then be injured by cold temperatures.

Pruning grapes and muscadines -Remember when pruning grape vines, the grapes are produced from the buds of one year old canes which are about 1/4 to 1/3 inches in diameter and are reddish brown. When properly pruned, 80 percent to 90 percent of the grape wood is removed every year. Now you know why people can make so many grapevine wreathes. Grape vines with a main trunk and four canes are often trained to a two-wire trellis. Before pruning, select four strong lateral one-year old canes (arms) that are close to the trellis and mark with a ribbon or colored tape. Tie the four arms to the trellis. Remove everything else. Prune off the ends of this year's arms so that 10 to 15 buds remain on each of the arms and only 2 to 3 buds are left on the renewal spurs.



Pruning fruit trees -Peaches, plums, pears and apples especially require annual pruning to remain productive. If left unpruned, fruit production tends to be limited to the top and outer portions of the tree and every other year. Harvesting becomes a real chore, and becomes left to the giants of the family. Remove any diseased or crossing branches first. Then cut back last year's growth by about 50%. Peaches and plums are usually pruned to an open-center so remember to keep that area free of branches, while apples and pears (diagram left) are typically pruned with a central leader.



More detailed information on the correct procedure for pruning, as well as general care, of fruit trees can be found in the following publications at your local extension office or on the extension.msstate.edu website:

IS1434 - FRUIT AND NUT REVIEW - PEACHES, NECTARINES, AND PLUMS

IS1433 - FRUIT AND NUT REVIEW - APPLES AND PEARS

P2290 - ESTABLISHMENT AND PRODUCTION OF MUSCADINE GRAPES

February Calendar of Events

Date	Event
	Blueberry Workshops
8th & 15th	<p>Mississippi blueberry producers have two opportunities during February to learn more about production of the state's largest fruit crop. The Mississippi State University Extension Service is hosting an in-person workshop Feb. 8 from 9 a.m. to noon at the MSU Extension Service office in Forrest County. The office is located at 952 Sullivan Drive in Hattiesburg. A virtual workshop will be held Feb. 15 from 1 to 2 p.m. Both workshops are open to blueberry producers and those interested in growing blueberries at any production level. Hobbyist winemakers and others interested in wine will enjoy the winemaking portion of the workshops. Topics for the in-person workshop include basics of blueberries and production, pollination and pollinators of blueberry plants, propagation techniques and tips, and winemaking with blueberries and wine blends with other fruits.</p> <p>Both events are free. No registration is required for the in-person workshop, however, preregistration IS required for the virtual workshop. To sign up, visit the Extension registration portal at http://tinyurl.com/yr6n66eu.</p>



USDA Changes Zones for Mississippi Plants

In case you missed the news, the USDA released its updated Plant Hardiness Zone Map in late 2023. The zone map features an updated chart that was previously drawn in 2012. Much of Mississippi is now in zone 8b. This zone has average low winter temperatures of 15–20 degrees. In unveiling the new zone map, USDA announced that the 2023 map is based on 30-year averages of the lowest annual winter temperatures measured at specific locations. Zones represent a 10-degree difference, and they are further divided into half zones based on 5-degree differences. Plant hardiness zone designations represent the average annual extreme minimum temperature at a given location during a particular time period.

In general, zone 9a was previously at the very tip of the Mississippi Gulf Coast, but the zone now covers the bottom three coastal counties plus Pearl River and Stone counties. Zone 8b was comprised of the six southernmost counties plus part of Forrest and Perry counties, then westward to Jefferson County and south. Now, the zone is about half the state from Noxubee and Kemper counties west to Yazoo County, then north to the Delta as far as Coahoma County.

Zone 8a was previously the middle portion of the state, but the zone is now a U-shaped area from DeSoto down to Attala, up to Oktibbeha and parts of Lowndes, and north to Itawamba County.

Zone 7b previously covered a portion or all of the 23 northernmost counties just east of the Delta. Now, the zone is a randomly shaped area that mostly includes Marshall, Benton, Tippah, Alcorn and Tishomingo counties.

Regardless of the changes, it will have little to no effect on what we grow in our specific locations.

