



Cold Weather Considerations for Backyard Birds

As cold, winter weather approaches we begin planning for those days when the temperatures drop to at or below freezing. We ponder what may be the best plan for our plants: when to cover them, when to move them inside, which ones may be cold-hardy enough to leave outside? But, along with plants, birds are dealing with the cold winter season, being in greatest need of food and water at this time.

If you are a wildlife enthusiast, it's likely you've already created a backyard habitat. Just like people, wildlife have three basic needs. These needs, commonly referred to as food, water, and cover, promote use and provide the lifecycle needs of wildlife. A successful backyard habitat must include all three needs. It takes only a small investment of time to make your yard or garden wildlife friendly by adding these essentials. While many of our smaller "wildlife friends" are nesting this time of year our birds are still fluttering about, enjoying another day. Here are some tips to assist your backyard birds during the cold weather.



Northern Cardinal



Eastern Bluebird

Placing bird feeders outside supplies a source of food for the birds while giving you a beautiful view. By using both perch-style and flat feeders, you can maximize food access to the greatest assortment of birds. Most backyard bird species prefer black oil sunflower seeds. Used feeders must be cleaned regularly, which can be done with a mixture of one part chlorine bleach to nine parts hot water. Once the feeder has air dried,

it can be replenished with fresh seed. Be sure not to place a bird feeder too close to a window as birds may mistakenly strike it. An additional food option perfect for this time are suet cakes, which can be purchased premade in stores. For water, it is best to provide multiple sources such as from bird baths and containerized ponds. For more information on how to create an environment suitable for wildlife, see Extension Publication 2402, *Establishing a Backyard Wildlife Habitat*.



INSIDE THIS ISSUE:

Growing Greens for Fresh Produce in the Winter	2
Garden Calendar	3
Protecting Plants from Cold Temperatures	4
Cold Temperatures and Citrus	5
Calendar of Events	6
Lawn Burweed	7

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Growing Greens for Fresh Produce in the Winter

I love cool-season gardening. It's a fantastic way to keep enjoying fresh and healthy produce even as the temperatures begin to drop, and days get shorter.

The cooler months are perfect for growing several crops such as broccoli, Brussels sprouts, cabbage, carrots, kale, lettuce and spinach.

I think lettuce is one of the easiest crops to grow in the fall, winter and spring. It only takes about 20 to 60 days to grow many varieties of lettuce, and they can tolerate frost and light freezing temperatures.

Growing lettuce in raised beds or containers is easier than growing it in-ground, which is more traditional. In containers, there is less weed competition and it is easier to harvest.

If you are looking for colorful lettuce to grow, Cherokee lettuce is a great selection. It has thick, medium-sized, reddish-maroon leaves. And unlike many lettuce varieties, it can tolerate warmer temperatures and not develop a bitter taste.

Ideal cos romaine lettuce is another great lettuce to grow. This selection is heat tolerant like Cherokee lettuce, but it also can tolerate frost and light freezing temperatures. Its green, upright foliage makes it a great choice for small gardens or raised beds. Its growth habit makes it a great choice for growing hydroponically.

Mustard and collard greens are two other classic cool-season vegetables for our fall gardens. Both leafy greens also grow well in raised beds and containers where they are more manageable and require less work.

It is surprising how many plants perform well in a small, raised bed or container. This allows you to enjoy fresh greens even if you only have a small patio, balcony, or sunny kitchen window.

If you like spicy greens, Red Giant mustard greens are for you. The flavor of the big mature leaves is similar to horseradish, while younger leaves usually have a milder flavor.

Red Giant is a colorful, purple-tinted mustard plant with large leaves and a bright green stem. Its purple color intensifies in cool temperatures. This plant matures in 35 to 40 days.

While mustard greens are good, I prefer collard greens for their sweeter flavor.

If you are interested in growing your own, try Top Chop, an excellent collard green with large, wide, smooth leaves. It is known for being very cold hardy. This collard plant usually takes about 74 days to mature. You can grow Top Chop in the fall, winter, and spring.

I've just named a few varieties, and there are many other great cool-season vegetables you can grow. Check your local nurseries and garden centers to see what is available in your area.



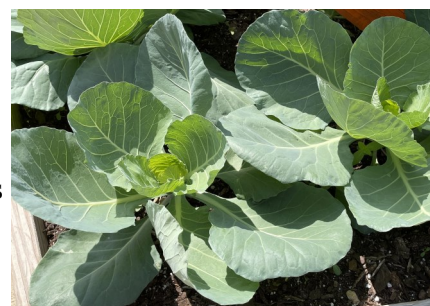
A Cherokee lettuce plant has reddish green leaves.



An Ideal cos romaine lettuce plant has



A Red Giant mustard plant has dark



A Top Chop collard green has wide

Garden Calendar: January

Now is the time of year that Cabin Fever and garden catalogs in our mailboxes get us dreaming about getting out into the garden.

Planning

- Start plans on paper for changes or improvements in the garden.
- Order seed for early planting.

Equipment

- Repair and sharpen mowers and tools. Order new pots and markers.
- Check condition of sprayers.

Planting

- Set out trees and shrubs.
- Plant Sweet Peas, Poppies, and Larkspur.

Fertilizing

- January - March is the proper time to fertilize trees and shrubs.
- Apply lime to lawns if needed.

Pest Control

- Scale on broad-leaf evergreens should be sprayed with dormant oil for control.

Pruning

- Trim Nandinas.

Mulch

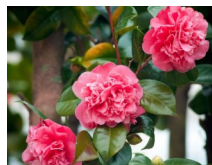
- Mulch Lilies with compost.
- Protect tender plants during periods of extreme cold.

Miscellaneous

- Keep bird feeders stocked. Provide water for birds.
- After freeze, check to make sure plants have not heaved out of the ground.

In Bloom

- Camellia, Winter Honeysuckle, Winter Jasmine, and in mild winters Flowering Quince





Tim Ray, C.A., Co. Coordinator & Extension Agent
MSU-ES Harrison County

Protecting Plants from Cold Temperatures

Although we live in south Mississippi, winter sometimes brings cold temperatures that can cause severe damage to many of our landscape plants. A late freeze after the temperature rises in January or February could cause more damage than the same cold temperature in winter when these plants have become dormant and more resistant to changes in temperature. An example is the sudden drop in temperature in late March of 2023 that killed or severely damaged many plants after they had begun budding out due to warmer temperatures in February and early March.

A plant's ability to withstand cold temperatures depends on plant species, and how low and how fast temperatures decrease. When temperatures gradually decrease, a plant can acclimate to withstand colder temperatures better. Plants that break bud dormancy due to warmer temperatures become more susceptible to late frost because of their new, tender growth. Cold injury can occur to all parts of the plant but, fruits and flowers are the least tolerant of cold injury because they have little ability to adjust or build up tolerance to colder temperatures. Leaf and stem tissues are injured and damaged when ice forms within the plant's cells causing the tissue to die, which typically occurs during a rapid freeze. Hardy or cold-acclimated plants can often withstand this type of ice formation. Windy conditions can also cause plant damage by desiccation, or the drying out of the plant. Desiccation causes marginal or leaf-tip burn or totally brown leaves in severe cases and occurs when a plant loses more water than it absorbs, especially when the ground is frozen.

The best way to prevent cold injury to plants is to choose plants that tolerate the cold temperatures in our area. Mississippi is in USDA Cold Hardiness Zones 7b, 8, and 9a with the southern and coastal areas of Mississippi being either Zone 8b (15–20 degrees F) or Zone 9a (20–25 degrees F). In addition to proper plant selection, proper site selection is essential. During the winter, the coldest spots are often found on the north and northwest parts of the property and in low areas where cold air settles. The warmest spots are usually on the southern part of the property.

Maintaining proper plant nutrition also helps protect your plants from cold damage. A plant that has been given the appropriate nutrition tolerates cold temperatures, withstands sudden temperature drops, and recovers from cold damage better than plants that are nutritionally deficient. If you're unsure of current nutrition levels a soil test may be appropriate. Be sure to pay attention to potassium levels. Potassium is an important element for cold weather protection and other stresses (heat, drought, disease, etc). Keep in mind, fertilizing plants in the fall (after August or September) with a fertilizer high in nitrogen can result in a flush of new growth that is more susceptible to cold temperatures. Pruning plants in late summer or early fall can also result in new growth that can be susceptible to cold injury. You can remove any damaged areas once the threat has passed. Don't mistake damaged with dormancy so wait until the plant begins leafing out to see what needs to be removed.

Watering plants before a freeze can help protect them from cold injury. Soil that is well watered absorbs more heat and then radiates heat, helping to increase the elevated temperature around the plants. Plants that grow close to the ground usually have more protection by heat radiating from the soil than plants that are tall and more open. Poorly drained soils result in plants that have weak and shallow roots, which are more susceptible to cold injury. Use mulch to help retain soil moisture. You can temporarily volcano mulch to help protect graft areas but be sure to remove the excess as soon as possible.

Protect plants that are in containers either by placing them inside a protective structure (house, garage, greenhouse) or by placing a protective covering over them. Container plants are more susceptible to cold temperatures than a similar plant growing in the ground. Roots that are damaged by cold temperatures may not show immediate signs of damage, but these plants will show signs of stress when temperatures increase. Push together container plants that are left outside, and mulch or cover them to decrease heat loss from the sides of the containers. Wrap the bases of the containers in plastic, burlap, or blankets to reduce heat loss.

Covering your plants helps protect them from frost as well as from extremely cold temperatures. Covers that reach the ground and do not come in contact with foliage form a layer of insulation from the cold temperature. To prevent foliage breakage, avoid having the covers (sheets, blankets) touch the foliage. Remember to remove these protective coverings from the plant canopy after cold temperatures have passed. Keep in mind, to cover plants effectively, drape the covering over the top of the plant all the way to the soil. Laying a covering over the top of the foliage only will not provide much protection.

Use a sheet, plastic, or frost cloth to aid in protection



Cold injury to Gardenia





Heath Steed, Co. Coordinator & Extension Agent

MSU-ES George County

Cold Temperatures and Citrus

We are starting to get some cool temperatures here in South Mississippi and one question that always comes up is “what should I do with my citrus on these cold nights?” Satsuma and Kumquat seem to be the most tolerant of cold temperatures while lemon and lime seem to be more sensitive. Most satsuma and kumquat are usually ok until the temp dips down to the low twenties and teens. However, lemon, lime, grapefruit and many other citrus may be damaged if temps get below high twenties.



A lot of the time citrus will have some burned leaves and twigs but still survive cold damage. In these cases, the dead twigs can be pruned off in late February or early March before the trees start to bloom. If your tree freezes below the graft, then the rootstock will sprout and form a new tree with undesirable fruit. At this point you can either graft some new scion wood to the rootstock or cut the tree down. With young trees you can mound up dirt around the trunk above the graft to protect the tree from freezing back below the graft but, the dirt should be pulled back away from the trunk after the cold event is over.



So, to prepare for cold temperatures make sure to water the trees well before the low temps come. A temporary frame can be built over the tree to cover the tree with frost cloth, blanket or other materials. Be careful if plastic is used because if the temp rises quickly without the

Fruit	Temperature (degrees in F)
Grapefruit	23-24
Orange	23-24
Kumquat	16-17
Lemon	26-27
Lime	28
Satsuma	18

tree being uncovered your tree can be burned, so I really don't recommend plastic, I've seen plenty of cooked trees from leaving plastic on too long. If you use a light bulb to help raise the temp a bit more make sure to keep it away from the covering and the bark of the tree. Make sure that some air can come into the covering for ventilation.

My favorite option is to spray water onto the tree with a micro sprinkler that will mist water onto the tree allowing it to freeze. Leave the emitter on throughout the cold event to form a good coating on the tree. Prior to the cold event the sprinkler should be turned on when temps reach about 36 degrees so the tree will be coated good when the temp goes below freezing. One of the main things to do with citrus as well as other plants is keep them healthy by watering, fertilizing at proper time and control insects when necessary.

Temperatures above reflect the tree only. Fruit freezes well above these temperatures. Harvest fruit before an extended freeze.

HAPPY NEW YEAR!!

2024

FROM ALL OF US WHO CONTRIBUTE TO THE
COUNTY GARDENERS EXTENSION EXPRESS
NEWSLETTER, WE THANK YOU FOR YOUR CONTINUED
SUPPORT AND WISH EACH OF YOU A VERY
HAPPY NEW YEAR!

January Calendar of Events

Date	Event
21st	The Crosby Arboretum will host a BEEKEEPING FOR BEGINNERS program from 1:30 to 3:00 p.m. Bees and gardens go hand in hand! Pearl River County Extension Agent Dr. Eddie Smith will give an introduction to getting started with beekeeping, covering native plants for bees, basic biology, equipment, protective gear, common mistakes and beneficial tips, how to grow your first colony of bees, and managing them throughout the year. The Crosby Arboretum is located at 370 Ridge Road in Picayune. The cost is free to members and \$5 for non-members. Registration is required by calling 601-799-2311.
25th	The Hancock-Harrison Forestry & Wildlife Association will host a CHRONIC WASTING DISEASE program beginning at 6:00 PM at The Camellia located at 27360 Hwy 603, Perkinston in Hancock County north of Standard Dedeaux Rd. A meal will be provided at \$15.00 per person. The meal is free for all members including new memberships. The Hancock/Harrison Forestry & Wildlife Association is a non-profit association so, to help cover meal costs preregistration is required by calling 228-731-8567 or emailing Tim Ray at tim.ray@msstate.edu by Monday, January 22nd.

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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MSU-ES Lamar County

Lawn Burweed

Lawn burweed (*Soliva pterosperma*) is more commonly known as sticker weed due to the cluster of tiny seeds with spines that stick into tender flesh of bare feet, knees, and hands, that may come in contact with them at seed maturity.

Lawn burweed is best described as a low-growing, freely branched winter annual having leaves that are twice divided into narrow segments or lobes similar to the appearance of tiny carrot leaves. The real identifier is the small rosette button fruit clusters that form down in the leaf axils once the plant reaches a reproductive stage. At maturity, usually late spring and into summer is when we endure their pain from the dried sharp spines.

If you did not apply a pre-emergent herbicide earlier this fall to control winter annual weeds, and you had lawn burweed in your lawn last summer, then you most likely have them again now and will have to endure their painful spines for another summer each time you walk barefoot on your lawn unless you take action soon to control them. Once the fruiting clusters have formed and produced the tiny seeds and spines killing the plants will eliminate the weeds, but the tiny spines and seed will remain to inflict pain for another summer.



Post-emergent options will be dictated by the primary turf species found within your home lawn. Products containing atrazine provide excellent control in centipede and St. Augustine lawns, while mix products containing 2,4-D, Dicamba, and MCP/ Mecoprop will provide good control. For most southern lawns, excluding bahiagrass, metsulfuron methyl can be a viable solution. For more products and information about turf tolerance to herbicides and more options please refer to Publication #1322 "Establish and Manage Your Home Lawn". Also, **fully read and obey all label directions and instructions** no matter which product you choose.

Extension publication #1532 "[Weed Control Guidelines for Mississippi](#)" provides a list of several good post-emergent herbicide choices that will control this weed along with most other winter annual weed species, but timing is critical.

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