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Fall Fertilization of Warm-season Turf Species

Applying late-season fertilizer applications to warm-season turfgrasses in Mississippi (winterizing) is a controversial management practice that stems from the concerns for potential winterkill, disease promotion, and the effect on total nonstructural carbohydrates.

Some research has indicated that late-fall nitrogen fertilization increases vulnerability to winterkill and promotion of diseases. Other studies, including those conducted by Mississippi State University, have shown no direct correlation to winterkill, but instead prolongs fall color and earlier recovery in the spring.

Late fall applications of potassium are standard recommendations and practices as potassium promotes winter hardiness and disease resistance in turf. A strong healthy lawn probably can do just fine without fall fertilization, but a weak stressed lawn can still benefit from a boost in nutrients. The first official day of fall is September 22nd, so we still have several weeks of growing conditions left for most of the state.

Therefore, a fall application of a winterizing fertilizer formulated to contain lower ratios of nitrogen to potassium, and particularly with nitro-gen sources that are released slowly, may be just what your lawn needs. Time the winterizing ferti-lizer application when temperatures begin to moderate and days begin to shorten, but before the turf goes dormant.

Regardless of time of year, lush turf growth stimulated by excessive nitrogen may be more susceptible to certain diseases and insects. Be prepared to treat accordingly with appropriate fungicides and/or insecticides. Your lawn fertilization program should be based on soil test analysis, turf use requirements, and grower expectations.

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Fall Weed Control

Control of winter annual weeds begins towards the end of summer and beginning of fall. preemergence herbicides should 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. Try to time the application within a day or two of 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 Pre-venter Plus; Nature's Guide Corn Gluten Meal

Garden Calendar: September

Get Ready
- Make sure you've ordered daffodils and other spring bulbs for October planting.
- Build or buy compost bin in anticipation of autumn leaves.

Plant
- Plant cool season leafy root vegetables: Carrots, Beets, Turnips, Lettuce, and Spinach.
- Sow hardy annuals: Sweet Alyssum, Calendula, Annual Pinks, Snapdragon, and Sweet Peas.
- Sow rye grass seed in winter lawns.

Fertilize
- Stop feeding mums when the buds start showing color.
- Acidify Azaleas and Camelias.

Water
- Slow down watering of Azaleas and Hydrangea to allow them to harden against winter freezes.
- Spray foliage of Camelias in anticipation of their bloom.
- Water potted plants and hanging baskets frequently.

Prune
- Disbud Camellias, Dahlias, and Chrysanthemums to produce specimen blooms. It is generally not a good idea to prune this late in the year, because new growth will be more susceptible to winter freezes.

Miscellaneous
- Turn compost pile.
- Propagate by layering. Scrape underside of a strong branch, bend down to ground, cover with soil and weigh down with a brick. Water from time to time and end of branch will put out new growth; becoming a new plant.
- Pick flowers in bloom and dry for future arrangements. Bundle flowers together and hang upside down in a dry, sheltered area.
- Repot houseplants. Prune away damaged foliage and give a good dose of food.

In Bloom
- Canna, Cosmos, Copper Plant, Marigolds, Periwinkle, Plumbago, Crape Myrtle, Althea, Four-o'clocks, Salvia, Ageratum, Coleus, Lycoris, Aster, Begonia, Celosia, Chrysanthemum, Coral Vine, Ginger Lily, Gladiolus, Jacobina, Liriope, Morning Glory, Petunia, Phlox, Rattle Box, Rose, Spider Lily, Torenia, Vinca, White Zephyranthes Lily, Zinnia, Buddleia, Franklin Tree.

Fall Color
- Flowering Dogwood with showy, drooping red leaves.
- Ginko leaves turn pure yellow.

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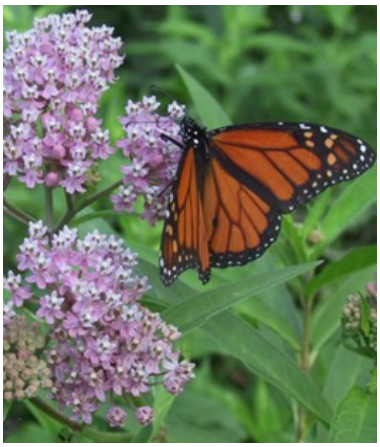
Three Basic Needs of Wildlife for a Backyard Habitat

Creating your backyard habitat can be very easy once you understand that wildlife, just like people, have three basic needs. These needs—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.

FOOD – You can provide food in two ways, artificial feeding - bird feeders, squirrel feeders, etc. and the preferred, natural vegetation - planting a variety of native trees, shrubs, grasses, and flowering plants that provide nuts, seeds, nectar, fruit, and other sources of nourishment. It provides a seasonal approach that is enjoyable from a gardening and recreational wildlife standpoint. This will encourage a wider range of creatures already accustomed to using these plants. Using natural vegetation, compared to providing artificial feed, is less costly over time and is easier to maintain. Remember that including plants that provide foraging opportunities in the winter offers an almost year-round supply of food.



WATER – Providing water for both drinking and bathing is vital to wildlife. You can include it by having birdbaths, drippers, or small ponds. Garden ponds that are large enough to include water animals (fish, frogs, toads, salamanders, snails), as well as water plants, add beneficial elements that complement most backyard habitat settings. Surrounding the pond with plants adds to the attraction for wildlife. Be sure the water source is dependable year-round.

SHELTER/REPRODUCTIVE AREAS —Nesting and shelter areas where wildlife are protected from the weather and predators is essential. Various species require different landscape features for these needs. Providing a diversity of plant material that includes evergreen and deciduous trees, vines, shrubs, herbaceous plants, grasses, and ground covers lets wildlife select the right areas for their feeding, nesting, and shelter needs. Ideal habitats include plants of various sizes, densities, and types. Evergreens are particularly valuable for winter cover. Grouping plants close to sources of food and water provides the cover wildlife need to feel safe while feeding or drinking. Of course, proper selection of plants includes those that provide food as well as good cover and nesting. Living plants are only one way to provide shelter and nesting areas. Using bat houses, bird houses, toad houses, and other artificial shelters is an easy way to meet this basic need. Providing shelter areas is especially valuable if you have a new landscape where trees and shrubs are not large enough to provide the necessary habitat. Old tree stumps, fallen logs, and brush and rock piles can also provide a great habitat for wildlife. Learning to appreciate these features (the dead tree snag or the pile of brush) for their natural artistry and wildlife benefits is helpful when creating the backyard habitat.

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Fall Armyworms

Late summer and early fall are usually the peak season for fall armyworm invasions of well managed turf, especially bermudagrass lawns, athletic fields and golf courses that have been fertilized and watered. However, fall armyworms have arrived early this year.

The moths migrate in large numbers and lay as many as a thousand eggs each. During these hot days of summer, the eggs hatch in only a few days with the tiny caterpillars feeding almost continuously. When small, they may go unnoticed while consuming only a small amount of leaf tissue daily, but nearing their last few days as larvae, they can literally devour an entire lawn almost overnight. Therefore, it is important that a careful scouting regime be established to detect their presence and control them while they are small.

At least once a week during the remaining growing season, randomly check several locations in the lawn by brushing the grass back and forth with your hand, parting the blades down to the soil line, and looking for coiled light tan or green to nearly black caterpillars. If you care to pick one of them up and look at it straight on, you may notice a small inverted “Y” marking on its forehead. A tip that golf course superintendents use to alert them of their arrival is checking the flags on the greens each morning for small light brown egg masses that have been laid on them by the moths during the night. You might try placing a small flag or white flat stake in your lawn as well. Other indicators of their presence are flocks of birds on your lawn or an abundance of paper wasps hovering close to the turf canopy, as both feed on the caterpillars.

Control is not too difficult if the lawn is treated with an appropriate insecticide when the caterpillars are small. Liquid sprays or granules containing active ingredients of bifenthrin, carbaryl, cyfluthrin, lambda-cyhalothrin, permethrin or trichorfon are recommended. Contact your local county Extension Service for more information.

Fall Online Master Gardener Training

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Managing Mole Crickets in the Lawn

Mole crickets thrive in the sandy soils we have on the coast. As we head into fall, you may notice more mole cricket damage in your lawn. Mole crickets do feed on grass roots, but the main way they cause damage to a lawn is through tunneling. The small tunnels will appear on the top of the soil throughout an infested lawn, and root damage from tunneling causes the turf roots to dry out and die.

The clawed front legs of mole crickets are ideal for tunneling through soil (Clemson University - USDA Cooperative Extension Slide Series, Bugwood.org).

The good news is that there are options for control, but the bad news is that the optimal time for insecticide application this year has passed. Timing is the most important factor when treating for mole crickets. Mole crickets produce one generation per year, and insecticides work better on newly hatched nymphs in June. They overwinter as large nymphs, which is why you'll notice the most damage in spring and fall. If you are seeing mole cricket damage now, do not forget to treat next June. For insecticide recommendations, reference MSU Extension Publication 2331: Control Insect Pests in and around the Home Lawn.

Mole crickets cause most turf damage by tunneling and disturbing turfgrass roots (University of Georgia, Bugwood.org).

If you notice damage to your lawn and want to verify the presence of mole crickets, you may want to try a soapy water flush to be sure. Soapy water flushes are more successful in freshly irrigated lawns as dry soil is not conducive to an effective soap flush. Mix 2 tablespoons of dishwashing soap in 1 gallon of water and pour over a 1-2 sq. ft. area. Mole crickets will surface within a few minutes. Irrigate after a soapy water flush to avoid sun scalding on the turf.


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Algal Leaf Spot

Algal leaf spot is one of the few plant diseases caused by a parasitic alga (*Cephaleuris virescens*). This pathogen frequently causes disease on southern magnolia and common camellia. The disease usually affects leaves, but can occasionally affect twigs of plants as well.

Algal leaf spot starts as a round, green, slightly velvety colony on leaf surfaces. As the spot develops further, it will turn reddish-brown. Frequently algal leaf spots will be colonized by a fungus which gives the spot a grey appearance. The fungi that associate with the algae does not harm plants. Symptoms of algal leaf spot first develop in the summer and may become more noticeable through the fall.

Algal leaf spot reproduces through spores which may be spread by both wind and water. Spores are produced when colonies are wet, and spores may spread through the film of water present on leaves. Problems with this disease are more severe following frequent rainfall and windy conditions. The pathogen for algal leaf spot survives through the winter on stem cankers and fallen leaves.

When algal leaf spot occurs at a low level it may be managed simply by removing leaves which show spots. Algal leaf spot is more severe on plants that are in poor conditions. Trees which are in direct sunlight and are watered excessively are particularly vulnerable. Fallen leaves should be raked to prevent them harboring the algae. Trees should be pruned to improve air circulation and promote the drying of leaves. This disease may also be controlled by the application of copper containing fungicides.