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HOME & GARDEN INFORMATION CENTER

Preparing & Managing Warm Season Grasses During the Offseason

The predominant turf grass types for most of South Carolina are the warm season grasses. It is only in the northern parts of the state that cool season grasses can survive summer heat consistently.

Warm season grasses commonly planted in South Carolina include St. Augustine, Centipede, Zoysia, and Bermuda. Each has distinct characteristics, but none are suitable for all conditions encountered by homeowners across the state. HGIC 1214, *Selecting a Turfgrass*, provides comparisons useful when selecting a turfgrass for new installations or managing a current turf grass type.

Warm season grasses are green for approximately six months, spend another two months in transition during early spring and fall and brown out for four ± months during the year. Growing seasons are longer in the southern parts of the state and shorter in the northern parts of the state.

Managing turf grasses correctly during the growing season is critical in preparation for proper winter dormancy for each turf type. Sudden early or winter freezes and potential disease problems associated with cooler temperatures during the fall and spring can cause significant damage when grasses are not physiologically prepared.

Critical Period

Over-irrigation, excessive rainfall, and/or nitrogen fertilization during late summer and early autumn can provide conditions that favor disease infection and increase cool season weed problems. The resulting succulent grass is also susceptible to winter damage from freezing temperatures. Starting irrigation or fertilization too early in spring before natural green up of turf may result in similar problems.

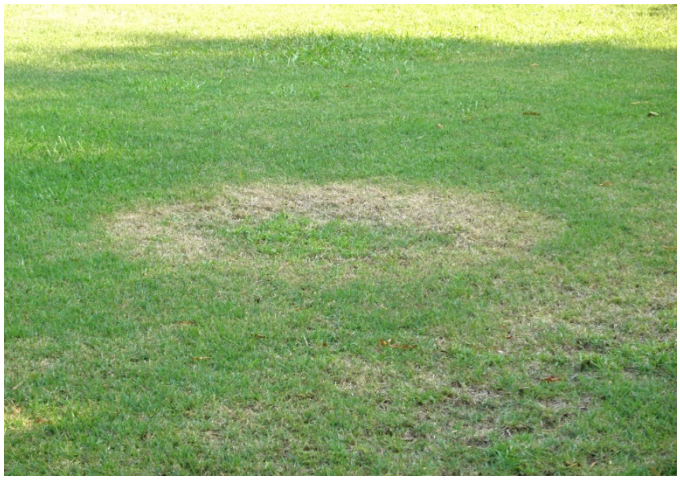
Irrigation Management & Seasonal Variations

It is important to recognize seasonal variations that affect warm season turf. Day lengths, air temperature, and soil temperature are drastically lower in April and September than July 1st. Irrigation systems are often left on the same cycle and volume setting for the entire season.

It is important to vary irrigation amounts through the season to adjust for seasonal differences. Turf should be irrigated during dry periods in fall or spring, but it is wise to water only as needed. Water deeply, but infrequently to maintain vigor, but not to stimulate quick succulent growth. Late fall and winter irrigation may be necessary on droughty exposed areas before severe freezes are expected to limit cold damage.

Disease

Large Patch, caused by *Rhizoctonia solani*, is the predominant disease that affects warm season turf grass under favorable conditions during early autumn and early spring. Homeowners should avoid practices that encourage late season turf growth.



Large Patch disease infections are often characterized by circular patterns in spring of slow to green up turf. This is often associated with shaded turf areas and compacted, or poorly drained soil.
James Hodges, Horticulture Extension Agent, Greenwood County, Clemson Extension

Fertility Management

Late summer or very early spring fertilization with fertilizers that contain significant amounts of nitrogen can increase severity of diseases such as large patch when they are present or developing.

Early spring fertilization and additional irrigation water draining from the landscape bed led to Large Patch disease development on adjacent turf, as seen in the middle of photo. Other areas of succulent turf were nipped by a late frost, and the cold temperatures caused the yellow color on the slope.
James Hodges, Horticulture Extension Agent, Greenwood County, Clemson Extension

Allow turf to gradually transition into dormancy in the fall and green up in spring. Avoid fertilization after mid-August in Piedmont and September 1st along the coast.

Don't feed the weeds with fertilization before full green up in spring, which is generally in May.

Shade & Turf Issues

Shade is a major enemy of turf which is too often overlooked, ignored, or not factored into turf health or vigor problems. Turf and trees can co-exist under certain favorable conditions, but when resources such as sunlight, nutrients, water, and growing space are limited, then trees eventual dominate unless you have a chainsaw.

St. Augustine lawn exhibits severe Large Patch disease infection after early fertilization and frequent irrigation applications were made to heavily shaded areas in April.
James Hodges, Horticulture Extension Agent, Greenwood County, Clemson Extension

Gradual removal of some lower branches every year or two can increase sunlight penetration to the ground and provide relief to turf. This is an important practice for fast growing trees that are planted in irrigated lawns. Expansion of mulched areas may also be a management tool to consider rather than mowing dirt. In some cases, some tree removal may be necessary to maintain turf under heavy shade.

A key turf management requirement in home landscapes is regular tree management so they can co-exist as both grow.

Cool Season Weeds

Many problem weeds of warm season turf are considered cool season growers. They grow during warm periods in fall, winter, and early spring. Improper fertilization and irrigation only encourages more growth at the expense of warm season turf.

Avoid the Late Winter, Sunny Day, Garden Center Trap

Depending on where you are located in South Carolina there are the usual explosions of available flowering and landscape plants at local garden centers in early March or early April.

Along with plants, tons of lawn fertilizers and weed and feed products stack the aisles, enticing homeowners and professionals to start the growing season too early on turf. Lawns in the southern part of the state do begin to grow earlier, but for most of the state turf does not fully green up until early May. So, do not rush the season.

Tips for Fall

- Follow the water and fertilizer guidelines above.
- Check turf for insects or diseases and treat if necessary.
- Remove leaves that cover turf as they fall.
- For shaded areas, prune tree limbs where possible to increase sunlight to the lawn.
- Take soil samples of turf areas now to get nutrient and acidity levels correct for your turf and then fertilize at the right time next spring.
- Expand mulch areas around trees if grass has been lost and tree roots are exposed.

Prepared by James F. Hodges, Senior Extension Agent, Greenwood, Clemson University Cooperative Extension Service. 09/16.