

BASIC TURFGRASS MANAGEMENT FOR GEORGIA

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This calendar is a basic guide to turfgrass management in Georgia. The different geographic locations and weather conditions within the state may alter this schedule by as much as four weeks. The schedule can also change within a site because of environmental factors such as moisture, temperature, shade, soil types and conditions, and pest populations. For additional turfgrass management information, contact your county Extension office, visit www.GeorgiaTurf.com, and follow us on Twitter @GeorgiaTurf.

SELECTION:

Turfgrass selection is arguably the most important factor in developing and maintaining a high quality, problem-free turf. Selection should be based on the environment, expected use, and management intensity. Turfgrass "certified" by the Georgia Crop Improvement Association (www.GeorgiaCrop.com) as to varietal purity, freedom from noxious weeds, and documented by the **blue certified tag** should be used.

ESTABLISHMENT:

The three phases of establishment are 1) soil preparation, 2) proper planting, and 3) maintenance for two to four weeks after planting. Cool-season grasses are best established in the fall four to six weeks before the first killing frost date. The best time to plant warm-season grasses is late spring or early summer, once soil temperature at the 4-inch depth is consistently above 65° F. Visit www.weather.uga.edu to find local climatic conditions.

MOWING:

Proper mowing involves cutting the grass at the recommended height and often enough to prevent scalping. This means removing no more than 1/3, or 30%, of the total leaf surface in a mowing. So, if a turf is being cut at 2-inches, mow it when it reaches 3 inches. Not removing clippings and allowing them to naturally filter down into the turf recycles nutrients, is environmentally sound, saves time and energy, and landfill space. Visit <http://t.uga.edu/sn> for more information on Grasscycling. Generally raising the mowing height during periods of stress helps maintain turfgrass vigor.

IRRIGATION:

Turfgrass water needs depend on grass species, maintenance level, soil type, and weather. Proper irrigation means waiting to irrigate when the turfgrass shows signs of moisture stress, such as a bluish-gray color. Most established turfgrasses require about 1-inch of water per week during the active growth season. Supplemental irrigation should wet the soil to a 6- to 8- inch depth. Multiple start times may be needed to prevent runoff and improve irrigation efficiency on clay based soils. Likewise, two, ½-inch applications are better on sandy soils. The most efficient and effective time to irrigate is after sunset and before sunrise.

Irrigating after dew development and before sunrise is most efficient and will not increase disease problems. The Water Stewardship Act of 2010 <http://t.uga.edu/sm> provides outdoor irrigation guidance to local communities and water purveyors. Per the act, outdoor irrigation can occur between the hours of 4 p.m. and 10 a.m. (evening, night and early morning). Local water providers can provide details for any additional restrictions on outdoor irrigation. Visit <https://t.uga.edu/2LN> and <https://t.uga.edu/2LO> for more information on turfgrass and landscape water conservation practices.

FERTILIZATION:

Depend on soil test analysis to determine the best fertilizer grade, rate and time of application. Generally, turfgrasses require ½ - to 1-pound of nitrogen per 1,000 ft² per month during active growth. Excess nitrogen increases plant growth which means more frequent mowing, increased plant water needs, thatch formation, and possibly insect and disease problems. Visit <https://t.uga.edu/2LK> and <https://t.uga.edu/2LL> for more information on turfgrass fertility.

Turfgrass	Annual Nitrogen Rate
	(lbs. per 1,000 ft ²)
Bermudagrass	2 to 5
Centipedegrass	1 to 2
Seashore Paspallum	2 to 5
St. Augustinegrass	2 to 5
Zoysiagrass	2 to 3
Tall Fescue	2 to 4

*Clippings do not contribute to thatch under proper management and do not need to be removed. Also, recycling clippings can decrease fertilizer needs by 30 percent.

CULTIVATION:

Common cultivation practices include coring, spiking and vertical mowing. Coring is the best method to reduce soil compaction and improve water infiltration. Coring is most effective using hollow or spoon-type tines which remove plugs of soil 2 to 3 inches deep and ½- to ¾-inch in diameter. The cores may be removed or broken-up and worked back into the turf by dragging or shattering and thus serving as topdressing. The recovery rate can be improved with a fertilizer application 10 to 14 days prior to cultivation.

THATCH CONTROL:

If the thatch layer is thicker than ½-inch turfgrass vigor can be reduced. Thatch can be effectively controlled by topdressing with a ¼-inch layer of topsoil. Thatch can also be reduced by vertical mowing. Vertical mowing should be done when the turf is actively growing and at least 30 days before the "first killing frost date". Vertical mowing should be avoided during periods of temperature and moisture stress, during periods of weed seed germination, or when a preemergence herbicide has been used.

OVERSEEDING:

Warm-season turfgrasses can be overseeded with cool-season grasses (ryegrass or rough bluegrass) to provide year-long green color. This type overseeding is usually done 2 to 4 weeks prior to the first fall temperature date of 32° F. The bermudagrasses tolerate overseeding best, while it is difficult to get a uniform overseeding in centipedegrass and zoysiagrass turfs. However, overseeding can be problematic for any turfgrass species, especially when already weakened from improper management. Common warm-season grass problems associated with overseeded turfs are weak stands due to competition with the overseeding species and delayed spring green-up.

RENOVATION: Turfgrass renovation is needed when a turf declines to the point that normal management and cultural practices are not enough to revive the grass but complete re-establishment is not needed. Generally, if 50% or more of the area contains desirable turfgrass, renovation will work. Renovate at the start of the growing season.

PEST CONTROL:

Good lawn management can help reduce pest problems. When pest control is needed; (1) identify the pest problem, (2) determine if cultural or other management practices are best suited for control, (3) select the chemical recommended to control the pest, (4) be sure the turfgrass will tolerate the chemical and (5) apply the chemical according to label recommendations. Proper timing of pesticide application is needed for effective and efficient pesticide use.

WEED CONTROL:

Preemergence herbicides should be applied before weed emergence. Recommended dates of application for crabgrass and other annual grasses are February 15 to March 5 in South Georgia and March 1 to March 20 in North Georgia. These dates typically correlate to soil temperatures which are below 55° F, the temperature at which crabgrass will germinate. Recommended dates for annual bluegrass and selected winter annual broadleaf weed control are September 1 to September 15 in North Georgia and October 1 to October 15 in South Georgia. Apply postemergence herbicides to small, actively-growing weeds at air temperatures between 60°F and 90°F. Applications to turfgrass stressed by high temperature or drought increases the possibility of injury and usually results in poor weed control. Atrazine or simazine can be applied to warm-season turfgrasses for preemergence and/or postemergence control of annual bluegrass and selected winter annual broadleaf weeds from November through February. Avoid all postemergence herbicide applications during spring green-up of warm-season turfgrasses.

DISEASE CONTROL:

The development and maintenance of a healthy, vigorous plant through proper turfgrass management is the best method of disease prevention. Proper fertilization and irrigation are very important disease prevention practices. If a disease is suspected, identification of the disease is needed before treatment can be recommended. (<http://t.uga.edu/so>)

INSECT CONTROL:

Of the many insects and related species living within a turfgrass canopy, very few cause damage. Some insects, such as white grubs and mole crickets, live in the soil and damage turfgrass roots. Others, such as armyworms and chinch bugs, feed on grass leaves and stems by chewing or sucking plant juices. When damage is apparent, an insecticide may be needed.