

# Zoysiagrass Lawn Maintenance Calendar

**NC STATE** EXTENSION

## Lawn Maintenance Calendars

### Introduction

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The following management practices will help you care for your lawn throughout the year. Location, terrain, soil type and condition, age of the lawn, previous lawn care, and other factors affect turf performance, so adjust these management practices and dates to suit your particular lawn.

### March Through May

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#### Mowing

Mow the lawn when it first turns green in the spring using a rotary or reel mower set as low as possible without scalping the lawn. Mow the grass before it grows taller than 1½ to 2½ inches. This initial mowing will remove excess dormant tissue and establish the desired mowing height for the year. Leave nutrient-rich grass clippings on the lawn unless they are unsightly or in clumps.

#### Fertilization

Apply nutrients based on soil testing. In absence of a soil test, apply ½ pound of nitrogen per 1,000 square feet approximately three weeks after greenup. In the absence of a soil test, use a complete nitrogen-phosphorus, potassium (N-P-K) turf fertilizer with a 3-1-2 or 4-1-2 ratio (for example, 12-4-8 or 16-4-8). If this ratio is not available, substitute with another complete analysis fertilizer for this first application. Do not apply more than 4 pounds of nitrogen per 1000 square feet per year.

*You need to apply ½ pound of nitrogen per 1,000 square feet, but how much fertilizer do you need to buy? Divide 50 by the first number on the fertilizer bag. For example, if you've got a 5-5-15 fertilizer, you divide 50 by 5 and you get 10. That means you need to buy 10 pounds of fertilizer for every 1,000 square feet of lawn.*

Zoysiagrass needs 0.5 to 1 inch of water a week. If you don't get enough rain, water your lawn. A dark bluish-gray appearance, footprinting, or wilted, folded, or curled leaves indicate that it is time to water. Irrigate the soil to a depth of 4 to 6 inches; this can be determined by probing the soil with a screwdriver or similar tool. On sandy soils, zoysiagrass may require up to ½ inch of water every third day. Proper irrigation now will help reduce problems later in the summer. See [Water Requirements of North Carolina Turfgrasses](#) (AG-661) for assistance in establishing controller runtimes in your region of North Carolina.

## Weed Control

Apply preemergence herbicides mid-February to early-March. Apply postemergence herbicides in May as needed to control summer annual and perennial broadleaf weeds like white clover, knotweed, spurge, and lespedeza. Products containing two or three different broadleaf herbicides are more effective in controlling broadleaf weeds in a lawn. Be sure the product you choose is labeled for use on zoysiagrass. Wait three weeks after the grass has turned green, and then use it only if weeds are present (see [\*Pest Control Recommendations for Professional Turfgrass Managers\*](#), AG-408). Glyphosate should not be sprayed on dormant zoysiagrass, as it will cause injury.

## Insect Control

White grubs may be active at this time but spring curative applications are not effective. Make note of areas with white grub activity and plan to apply a preventive application in the spring or early summer. Specific timing will vary depending on white grub species, so plan to make an application when adult flight is at its peak (see [\*White Grubs in Turf\*](#) for specific recommendations).

## Disease Control

Circular patches of tan or brown sunken turf 2 to 10 feet in diameter may appear as zoysia greens up, especially if there is extended rainy or overcast weather. Turf within the affected area thins, and most of the shoots die. As temperatures increase, recovery begins but is slow. **Do not** apply nitrogen until you see that the lawn has started to improve. Control large patch disease by mowing to the proper height, mowing when the lawn is dry, and controlling thatch. A spring application, when zoysiagrass is emerging from dormancy, may be necessary after a warm, wet winter.

## Thatch Removal

After the grass has turned green, use a vertical mower (power rake) to remove thatch (a layer of undecomposed grass stems) if it is more than  $\frac{1}{2}$  inch thick. Do not attempt to remove too much thatch at one time because zoysiagrass recovers slowly. Several thatch removals over several seasons may be needed.

## Renovation

Replant large areas using zoysiagrass sod or plugs. Plugs should be planted on 6- or 12-inch centers (see [\*Carolina Lawns\*](#), AG-69). After plugging, apply a preemergence herbicide that does not interfere with zoysiagrass root growth to help prevent weeds.

# June Through August

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## Mowing

Follow March through May guidelines.

## Fertilization

Apply  $\frac{1}{2}$  to 1 pound of nitrogen per 1,000 square feet in late June or early July. Repeat in mid-August.

## Watering

Follow March through May guidelines.

## Weed Control

Apply postemergence herbicides as needed to control summer annual and perennial broadleaf weeds. Do not apply postemergence herbicides unless weeds are present, grass is actively growing, and the lawn is not suffering from drought. Crabgrass species, goosegrass, dallisgrass, purple and yellow nutsedge, annual sedges, and sandbur can be controlled with postemergence herbicides. However, two or three applications will be necessary for satisfactory control. Zoysiagrass can be sensitive to some postemergence herbicides, so select the products carefully.

## Insect Control

Preventive treatments for white grubs can occur in June, when adults are flying and starting to lay eggs. Curative treatments for white grubs are applied after the larvae have hatched from the egg stage. The best time to apply curative treatments is when grubs are actively feeding near the soil surface, approximately 24 hours after significant rainfall (see [White Grubs in Turf](#), for specific recommendations).

## Thatch Removal

Vertically mow in June or July as needed using the March through May guidelines.

# September Through November

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## Mowing

Follow March through May guidelines.

## Fertilization

**Do not** apply nitrogen at this time. Do apply 1 pound of potassium (potash  $K_2O$ ) using 1.6 pounds of muriate of potash (0-0-60), 2 pounds of potassium sulfate (0-0-50), or 5 pounds of sul-po-mag (0-0-22) per 1,000 square feet.

*To determine the amount of product needed to apply 1 pound of potash per 1,000 square feet, divide 100 by the **third** number on the fertilizer bag. For example, if you've got a 6-6-12 fertilizer, divide 100 by 12 and you get 8.3. That means you need to apply 8.3 pounds of product for every 1,000 square feet of lawn.*

## Watering

You won't have to water much once the lawn is dormant (has turned brown), but do water if the soil is powder dry.

## Weed Control

Apply preemergence herbicides to control winter annual and perennial broadleaf weeds like chickweed and henbit. Apply postemergence herbicides only when weeds are present.

## Insect Control

Check for and control any white grubs.

## Disease Control

If large patch disease is a chronic problem, apply a fungicide as a preventive (see *Pest Control Recommendations for Professional Turfgrass Managers*, AG-408, and *Large Patch in Turf*).

Fungicides should be applied in the fall when soil temperatures consistently reach 70°F. Two applications in the fall, 21 to 28 days apart, is usually sufficient to prevent large patch.

# December Through February

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## Mowing

It is not necessary to mow, but do remove rocks, sticks, and leaves.

## Fertilization

**Do not** fertilize zoysiagrass at this time. Soil should be tested every three years; contact your local N.C. Cooperative Extension center or the NC Department of Agriculture for details. Apply lime as suggested to modify soil pH.

## Watering

Water occasionally if a drought occurs.

## Weed Control

Apply broadleaf herbicides as necessary to control winter annual weeds like chickweed.

# More About Zoysiagrass

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Zoysiagrasses are low-growing, very slow-growing, sod-forming grasses. They make a very dense, wear-resistant lawn but are slow to recover from injury. Zoysiagrass grows best in full sun or partial shade and is well adapted to the piedmont and coastal plain. It requires less mowing but is tougher to mow than bermudagrass. It is easier to keep out of ornamental beds than bermudagrass.

Zoysiagrass is normally vegetatively planted (sod or plugs), but seeded varieties Zenith and Compadre are available. Establishment from plugs is very slow (typically two to four years). Once established, zoysiagrass may become “thatchy” (puffy due to an accumulation of decomposing plant residue at the soil surface). This most frequently occurs when it is mowed too infrequently or is excessively fertilized. Thatch may need to be carefully removed every three to five years; recovery is slow.

## ***Vegetative Types.***

There are currently over a dozen zoysiagrass cultivars available from North Carolina sod growers. These include: Cavalier, Compadre, Crowne, El Toro, Emerald, Empire, Geo, Jamur, Leisure Time, Meyer, Palisades, Zenith, Zeon, and Zorro. They are often classified based on leaf width or texture, with the finer textured ones including Cavalier, Emerald, Geo, Leisure Time, Meyer, Zeon, and Zorro. The zoysiagrass sod availability in North Carolina can be found by visiting the [NC Sod Producers Association website](#).

Zoysiagrasses are subject to diseases such as rust, large patch, and dollar spot. They are also susceptible to damage by nematodes, particularly in the coastal plain.

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