



GRASS FACTS

for Southern Wake & Johnston County Homeowners

GROWING A LUSH LAWN IN NORTH CAROLINA

If you live in Southern Wake County or Johnston County, you've probably noticed something frustrating—no matter what you do, there's no single “perfect” lawn for this area. That's because we sit in one of the toughest regions in the country to grow grass, known as the transition zone, where both northern and southern grass types struggle to fully thrive.

SOUND FAMILIAR?

- ✓ Your lawn doesn't behave like the lawns you see online.
- ✓ What works in one yard fails in another down the road.
- ✓ And every summer feels like a battle between heat, weeds, & thin grass.



919-621-7163



www.hiveandhomeyardscapes.com



THE TROUBLE WITH THE TRANSITION ZONE

North Carolina is called a transition zone because it sits between:

- Northern climates, where cool-season grasses thrive
- Southern climates, where warm-season grasses dominate

Here, we get the extremes of both:

- Summer heat that can exceed what cool-season grasses can tolerate
- Winter cold that can damage warm-season lawns

As a result:

- Cool-season grasses grow best in spring and fall
- Warm-season grasses thrive in summer but go dormant in winter

There is no “perfect” grass here—only the best choice for your specific property and goals.



Your Grass Options in This Area

You do have a choice, but each comes with trade-offs.

Warm-Season Grasses

(Best for Summer Performance)

- Bermuda
- Centipede
- St. Augustine
- Zoysia

Cool-Season Grasses

(Best for Year-Round Green)

- Fescue
- Kentucky Bluegrass
- Rye Grass

Each of these grasses behaves very differently in this region—which is why understanding them is critical before making a decision.



919-621-7163



www.hiveandhomeyardscapes.com

BERMUDA GRASS

About Bermuda Grass

Bermuda grass (*Cynodon* species) is a warm-season, medium- to fine-textured turfgrass known for excellent heat, drought, and wear tolerance—making it one of the most popular lawn grasses in North Carolina. It spreads aggressively through stolons and rhizomes, forming a dense, durable turf.

WHERE IT GROWS BEST

- Thrives in the Piedmont and Coastal Plain
- Poor shade tolerance
- Turns brown & dormant in winter

MOWING GUIDELINES

- Optimal Height:
 - Reel Mower: 0.75–1"
 - Rotary Mower: 1–2"
(Keep blades sharp)
- Begin mowing when the lawn first greens up, before it exceeds 2–2.5 inches.

WATERING NEEDS

- 1"/week during active growth.
- Sandy soils - 0.5" every 3 days
- Clay soils - slow, staggered irrigation to prevent runoff.
- Wilting, folded, or bluish-gray leaves indicates water need.

FERTILIZATION

- ½–1 lb of nitrogen per 1,000 sq ft several weeks after full green-up (typically April–May).
- For soil testing, contact your local Extension center.
- Leave grass clippings unless clumped—they return nutrients to the soil.

LAWN CARE TIPS

- Apply pre-emergent herbicides from mid-February to early March.
- Use post-emergent herbicides in May for weeds such as white clover, knotweed, spurge, and lespedeza.
- Ensure the product label specifies safe for bermudagrass.

PEST & DISEASE NOTES

- White grubs are the most common insect issue.
- Rapid growth can lead to thatch buildup—dethatch as needed.
- Spring dead spot may appear during early-season green-up.



ADVANTAGES

- Very heat-tolerant and drought-resistant
- Excellent wear tolerance—great for pets, kids, and play areas
- Recovers quickly from damage
- Widely available as sod, seed, or sprigs



DIS-ADVANTAGES

- Poor shade tolerance
- Can become invasive into garden beds
- Turns brown in winter dormancy
- Requires sharp mower blades and frequent mowing in summer

CENTIPEDE GRASS

About Centipede Grass

Centipede grass (*Eremochloa ophiuroides*) is a slow-growing, warm-season turfgrass commonly used in NC lawns thanks to its low maintenance requirements and light apple-green color. Often called “lazy man’s grass” because it needs less mowing and fertilizer than other grasses.

WHERE IT GROWS BEST

- Thrives in eastern NC and the lower Piedmont, where soils are naturally acidic.
- Has limited cold tolerance, making it less suited for mountain and colder inland regions.
- Turns brown and dormant in winter (typically Nov–Apr).

MOWING GUIDELINES

- Maintain a mowing height of 1–2 inches.
- Mow often enough to avoid removing more than $\frac{1}{3}$ of the blade.
- High mowing or infrequent mowing may lead to thatch buildup.

WATERING NEEDS

- 1 “ of water per week during active growth.
- Has low drought tolerance due to shallow roots—monitor during dry spells.

FERTILIZATION

- Requires very low nitrogen compared to Bermuda
- Apply 0.5–1.0 lb nitrogen per 1,000 sq ft several weeks after full green-up (typically April–May).
- Avoid over-fertilizing—a leading cause problems
- Do not apply phosphorus unless a soil test shows deficiency.
- Iron sprays can temporarily improve color in high-pH soils.

LAWN CARE TIPS

- 6 hours of sunlight per day. Tolerates light to moderate shade but not heavy shade
- Has poor traffic tolerance
- Prefers acid soil (pH 5.0–5.5).
- Do NOT apply lime unless a soil test recommends it.
- High soil pH can cause iron deficiency and yellowing.
- Performs best in sandy, well-drained soils.

PEST & DISEASE NOTES

- Centipede decline (poor green-up, thinning, die-off), often tied to over-fertilization or incorrect pH.
- White grubs and nematodes, especially in sandy soils.
- Highly sensitive to certain herbicides, particularly products containing 2,4-D



ADVANTAGES

- Low fertilizer & mowing requirements
- Thrives in acidic NC soils
- Good drought survival
- Naturally suppresses some weeds due to dense stolons



DIS-ADVANTAGES

- Poor cold, shade, and traffic tolerance
- Sensitive to herbicides & high-pH soils
- Prone to iron deficiency on alkaline soils
- Slow to recover from damage

SAINT AUGUSTINE GRASS

About St. Augustine Grass

St. Augustine grass (*Stenotaphrum secundatum*) is a warm-season turfgrass known for its shade tolerance, medium to dark green color, and coarse texture. It spreads by stolons and forms a dense, weed-resistant lawn. It is the least cold-tolerant warm-season grass, which limits where it can be successfully grown in North Carolina

WHERE IT GROWS BEST

- Coastal areas, Wilmington southward, where winters are milder.
- NOT recommended for Charlotte, Piedmont, or inland NC due to frequent winter injury and cold snaps.
- Cold-tolerant varieties like 'Raleigh', perform better but still risk winter damage.

MOWING GUIDELINES

- Mowing height 2.5 "– 4" Taller mowing improves shade & drought tolerance.
- Mow with a sharp rotary blade—remove no more than ⅓ of the height.
- Remove dormant leaf tissue by mowing to 2.5" before spring green-up.

WATERING NEEDS

- 1 inch of water per week during active growth.
- Sandy soils (common in coastal NC) may need ½ inch every third day for consistency.
- Proper irrigation helps prevent pest and disease problems.

FERTILIZATION

- Submit a soil test before fertilizing; apply lime only if recommended.
- Fertilize with ½ lb of nitrogen per 1,000 sq ft in May or two weeks after green-up. Use a 3-1-2 or 4-1-2 ratio fertilizer (e.g., 12-4-8 or 16-4-8).
- Yellowing may indicate iron deficiency—treat with iron sulfate or a chelated iron product.

LAWN CARE TIPS

- The most shade-tolerant warm-season grass, thriving with 4–6 hours of sunlight per day, where Bermuda and Zoysia struggle.
- Apply pre-emergent herbicides in mid to late February to control crabgrass and goosegrass.
- Use post-emergent products cautiously—St. Augustine grass is sensitive to 2,4-D and MSMA.

PEST & DISEASE NOTES

- Chinch bugs are the most common pest—check suspicious yellow patches, especially in sunny areas.
- Prone to gray leaf spot and large (brown) patch, especially with overwatering or excessive nitrogen.
- Thatch buildup may require periodic dethatching.



ADVANTAGES

- Excellent shade performance
- Dense growth that suppresses weeds
- Soft, lush appearance
- Fast establishment from sod or plugs



DIS-ADVANTAGES

- Low cold tolerance—damages/dies in inland NC
- Watch for chinch bugs & fungal disease
- Frequent mowing during peak growth
- Install via sod or plugs only—no seed

ZOYSIA GRASS

About Zoysia Grass

Zoysiagrass (*Zoysia* spp.) is a warm-season turfgrass that spreads by rhizomes and stolons, forming a dense, wear-resistant lawn. It has stiff leaves, a carpet-like feel, and is often chosen for its durability and low mowing requirements.

WHERE IT GROWS BEST

- Best adapted to Piedmont and Coastal Plain regions.
- Some cold-tolerant varieties can also grow in parts of western NC.
- Thrives in full sun to light shade, making it versatile across many home landscapes.

MOWING GUIDELINES

- Best adapted to Piedmont and Coastal Plain regions.
- Some cold-tolerant varieties can also grow in parts of western NC.
- Thrives in full sun to light shade, making it versatile across many home landscapes.

WATERING NEEDS

- 0.5–1" of water per week during active growth.
- Sandy soils may require ½ inch every third day during hot periods.
- Signs of drought stress include bluish-gray color, folded leaves, and footprinting.

FERTILIZATION

- Apply nutrients based on a soil test; if none is available, use a 3-1-2 or 4-1-2 ratio fertilizer (e.g., 12-4-8 or 16-4-8).
- General guideline: ½ lb nitrogen per 1,000 sq ft ~3 weeks after green-up.
- Do not exceed 4 lbs nitrogen per 1,000 sq ft per year.

LAWN CARE TIPS

- Apply pre-emergent herbicides from mid-February to early March.
- Use post-emergent herbicides in May as needed—ensure the product is labeled safe for zoysia.
- Avoid glyphosate on dormant zoysia; it causes lawn injury.

PEST & DISEASE NOTES

- Watch for white grubs; treat if needed.
- Brown patch may occur during extended wet weather—improve drainage and avoid excess nitrogen until recovery begins.
- Prone to thatch buildup.
- Turns brown and dormant in winter, then greens up in late spring.



ADVANTAGES

- Very dense, weed-resistant turf
- Drought tolerant and heat-resistant
- Handles full sun and light shade
- Requires less frequent mowing than Bermuda



DIS-ADVANTAGES

- Slow to establish
- Can develop thatch
- Leaves demand sharp mower blades
- Turns brown in winter dormancy

FESCUE GRASS

About Fescue Grass

Tall fescue (*Festuca arundinacea*) is the most widely grown cool-season grass in North Carolina. It tolerates heat, drought, and disease better than most and stays green year-round in much of the state. It is also a bunch-type grass, meaning it does not spread by stolons or rhizomes and may need periodic reseeding in thin areas.

WHERE IT GROWS BEST

- Thrives in the mountain and piedmont regions.
- Grows in the coastal plain only in heavier loam soils. Performs poorly in full-sun, sandy coastal soils.
- Excellent option if you want a green lawn year-round.

MOWING GUIDELINES

- Mow height between 2.5" – 3.5" in spring and 3.5" in summer.
- Mow often enough to avoid removing more than $\frac{1}{3}$ of the blade height at a time.
- Leave clippings on the lawn—they supply up to 25% of annual fertilizer needs.

WATERING NEEDS

- 1"/week during the growing season, ideally delivered in multiple lighter applications.
- Sandy soils may require $\frac{1}{2}$ inch every 3 days
- Dark bluish-gray color, wilted, or folded leaves indicate drought stress.

FERTILIZATION

- Do most fertilizing in fall—this is when fescue grows strongest.
- In spring, only fertilize lightly if needed and avoid fertilizing after March 15.
- Typical spring rate: 0.2–0.5 lb nitrogen per 1,000 sq ft if color recovery is needed.

LAWN CARE CALENDAR

- Apply pre-emergent in early March (February in warmer areas).
- Avoid herbicides during summer heat.
- Overseed mid-Aug to early Sept (~6 lbs/1,000 sq ft).
- Aerate and repair thin areas in fall.

PEST & DISEASE NOTES

- White grubs: monitor in spring; treat preventively next season.
- Brown patch: common in warm, humid conditions (nights $>68^{\circ}\text{F}$, days $>85^{\circ}\text{F}$).
- Mow above 3", water early morning, and avoid nitrogen during outbreaks.
-



ADVANTAGES

- Stays green most of the year
- Good heat & drought tolerance
- Low thatch buildup
- Simple to maintain with proper mowing and fall care



DIS-ADVANTAGES

- Thins in extreme heat
- Requires fall overseeding
- Prone to brown patch in humidity
- Doesn't spread—reseeding needed

KENTUCKY BLUEGRASS GRASS

About Kentucky Blue Grass

Kentucky bluegrass (*Poa pratensis*) is a cool-season turfgrass known for its dark green color, fine-to-medium texture, and its ability to recover from stress due to aggressive rhizomes. It is the second most widely grown cool-season species in North Carolina.

WHERE IT GROWS BEST

- Best in mountains; pairs well with fescue in the Piedmont
- Not suited for the heat and humidity of the coastal plain
- Needs full sun to light shade; benefits from afternoon shade in heat

MOWING GUIDELINES

- When grown alone: mow at 1.5–2.5 inches.
- When mixed with tall fescue: mow at 2.5–3.5 inches.
- Mow no more than $\frac{1}{3}$ of blade height
- Leave clippings to naturally recycle nutrients.

WATERING NEEDS

- 1"/ week during active growth.
- Water between 2–8 a.m. in 2–3 sessions per week for best absorption.
- May go semi-dormant in high heat—supplemental irrigation helps maintain color.

FERTILIZATION

- Apply $\frac{1}{5}$ – $\frac{1}{2}$ lb nitrogen per 1,000 sq ft in early spring (March).
- Avoid heavy summer fertilizing due to heat stress risk.
- Kentucky bluegrass prefers fertile, well-limed soils (pH near 6–7).

LAWN CARE CALENDAR

- Apply pre-emergent in early March for crabgrass, goosegrass, and foxtail
- Don't overseed if pre-emergent was used
- Use post-emergent sparingly during heat stress
- Overseed mid-Feb to late March if no pre-emergent was applied
- Often mixed with tall fescue for better summer survival

PEST & DISEASE NOTES

- White grubs may appear—treat preventively in late summer or fall.
- Prone to Summer Patch disease, especially in high heat and humidity.



ADVANTAGES

- Rich dark-green color
- Fills in thin areas via rhizomes
- Recovers well from wear
- Performs well in cool NC regions



DIS-ADVANTAGES

- High maintenance compared to fescue
- Poor heat tolerance in Piedmont area
- Not suitable for coastal NC
- Susceptible to Summer Patch disease

RYE GRASS

About Rye Grass

Perennial ryegrass (*Lolium perenne*) is a cool-season, bunch-type grass known for its fast germination, fine texture, and dark green color. It's widely used in NC for winter overseeding to maintain green color when warm-season lawns go dormant.

WHERE IT GROWS BEST

- Performs best in the piedmont and mountain regions
- Less suitable in coastal NC, because summer heat shortens its lifespan.
- Commonly used to overseed Bermuda lawns in fall for winter color.

MOWING GUIDELINES

- Maintain mowing height at 2.5–3.5 inches.
- Mow frequently enough to avoid removing more than $\frac{1}{3}$ of the blade at a time.
- Keep mower blades sharp—ryegrass has smooth, fine leaves that require clean cutting.

WATERING NEEDS

- Needs consistent moisture, especially during germination and cool seasons
- Requires ~1" water per week when established
- Less drought tolerant than fescue; may thin in heat

FERTILIZATION

- As a cool-season grass, fertilizer needs are similar to tall fescue & Kentucky bluegrass.
- Apply $\frac{1}{5}$ – $\frac{1}{2}$ lb nitrogen per 1,000 sq ft in early spring if needed.
- Overseeded warm-season lawns (e.g., Bermuda) may be lightly fertilized in late fall for winter color.

LAWN CARE CALENDAR

- Prefers sun to light shade and well-drained soil
- Optimal pH: 6.0–7.0
- Commonly used in NC for overseeding
- Bunch-type—requires annual overseeding
- Overseed mid to late fall (ideal: mid-October)
- Germinates in 5–10 days
- Seed at 2–4 lbs / 1,000 sq ft

PEST & DISEASE NOTES

- Susceptible to brown patch in humid summers; avoid excess moisture.
- Can become a weed in warm-season lawns if it survives the summer and becomes clumpy. Control before clumping occurs.



ADVANTAGES

- Germinates very quickly
- Excellent winter color
- Fine texture and rich green appearance
- Good wear tolerance for foot traffic



DIS-ADVANTAGES

- Not heat tolerant—dies in NC summers
- Requires regular irrigation
- Annual reseeding for winter lawns
- Can become weedy if not controlled

CONTACT HIVE AND HOME YARDSCAPES TODAY!

At Hive & Home Yardscapes, we know there's no one-size-fits-all lawn in Southern Wake and Johnston County—only the right solution for your specific property. From soil conditions and drainage to sun exposure and how you actually use your yard, we take everything into account to build a lawn that not only looks great, but lasts. If you're tired of guessing and want real answers, let our team take a look. **Schedule your free yard inspection today** and we'll show you exactly what your lawn needs to thrive.



919-621-7163



www.hiveandhomeyardscapes.com