

# How to Fertilize St. Augustine Grass in Florida

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Florida's subtropical climate presents unique challenges and opportunities for maintaining a lush, vibrant lawn. For homeowners in the Sunshine State, St. Augustine grass is the undisputed king of turf. Known for its wide blades and deep green hue, this resilient grass thrives in our warm, humid environment. However, achieving that picture-perfect lawn requires more than just regular mowing and watering. Proper fertilization is the cornerstone of a healthy St. Augustine lawn, but doing it right in Florida means navigating specific soil conditions, strict local regulations, and the unique nutritional needs of the grass itself.

Whether you are dealing with the sandy soils of Palm Beach or the strict summer fertilizer bans in Martin County, understanding the science and schedule of fertilization is crucial. This comprehensive guide will walk you through everything you need to know about fertilizing St. Augustine grass in Florida, from deciphering N-P-K ratios and timing your applications to mastering the art of slow-release nitrogen and iron supplements. By following these expert tips and University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) guidelines, you can cultivate a resilient, beautiful lawn that enhances your home's curb appeal while protecting our precious local waterways.

## Understanding the Basics: N-P-K Ratios and Soil Testing

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Before spreading any fertilizer on your lawn, it is essential to understand what you are actually feeding your grass. Every bag of fertilizer features three prominent numbers, known as the N-P-K ratio. These numbers represent the percentage by weight of Nitrogen (N), Phosphorus (P), and Potassium (K) contained in the product. For St. Augustine grass in Florida, nitrogen is the primary driver of vibrant green color and vigorous blade growth. Phosphorus supports strong root development, while potassium enhances the grass's overall stress tolerance, helping it withstand disease, drought, and foot traffic.

However, Florida's unique geology means our soils are often naturally rich in phosphorus. Applying excess phosphorus when it is not needed can lead to severe environmental issues, as runoff carries the nutrient into local waterways, fueling harmful algae blooms. Because of this, many Florida municipalities restrict the application of phosphorus unless a soil test explicitly proves a deficiency.

This brings us to the most critical first step in your lawn care journey: conducting a proper soil test. A soil test takes the guesswork out of fertilization by revealing the exact pH level and nutrient profile of your yard. St. Augustine grass prefers a slightly acidic to neutral pH, typically between 6.0 and 7.5. If your soil is too alkaline, which is common in coastal areas with shell-based soils, the grass may struggle to absorb nutrients like iron, leading to a condition called chlorosis, or yellowing of the blades. You can easily obtain a soil testing kit from your local UF/IFAS Extension office. By sending a sample to their laboratory, you will receive a detailed report outlining exactly which nutrients your lawn needs and which ones it already has in abundance.

## **The Power of Slow-Release Nitrogen**

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When selecting a fertilizer for your St. Augustine lawn, the type of nitrogen it contains is just as important as the amount. Nitrogen fertilizers generally fall into two categories: quick-release (soluble) and slow-release (controlled-release). Quick-release nitrogen provides an immediate flush of green growth, but it washes through Florida's porous, sandy soils rapidly. This not only wastes your money but also increases the risk of nutrient leaching into the groundwater. Furthermore, pushing too much rapid growth can make your St. Augustine grass more susceptible to pests like chinch bugs and fungal diseases.

For Florida lawns, slow-release nitrogen is the superior choice. These fertilizers are coated in materials like sulfur or polymers that gradually break down, delivering a steady, consistent supply of nutrients to the grass roots over several weeks or even months. UF/IFAS guidelines strongly recommend using fertilizers containing at least 65 percent slow-release nitrogen. This approach ensures your lawn receives a sustained feeding, promoting deep, robust root systems rather than just superficial top growth.

When applying fertilizer, the rule of thumb is to apply no more than one pound of actual nitrogen per 1,000 square feet of lawn per application. If you are using a product with slow-release nitrogen, you may be able to apply up to two pounds of nitrogen per 1,000 square feet, depending on the specific formulation and local

regulations. Always read the product label carefully and calibrate your spreader to ensure you are delivering the correct dose.

## **Timing is Everything: Spring and Fall Applications**

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In Florida, the timing of your fertilizer applications is dictated by the distinct growing seasons of St. Augustine grass. The grass enters a period of active growth as temperatures rise in the spring and slows down significantly during the cooler winter months. Fertilizing at the wrong time can be ineffective or even detrimental to your lawn's health.

The best time to initiate your fertilization program is in the spring, shortly after the grass has fully greened up and the danger of late frost has passed. For Central Florida, this typically falls in early April, while North Florida residents should wait until mid-April. In South Florida, where the climate is warmer year-round, applications can often begin earlier. A high-quality, slow-release fertilizer applied in the spring provides the essential nutrients the grass needs to recover from winter dormancy and build a strong foundation for the stressful summer months ahead.

Fall is the second most critical time for fertilization. An application in late September or October helps the grass store carbohydrates in its root system, preparing it to endure the cooler winter temperatures. For this application, a fertilizer with a higher potassium content is often beneficial, as potassium bolsters the grass's cold tolerance and overall hardiness.

It is crucial to avoid fertilizing during the winter months, particularly in North and Central Florida. Applying nitrogen when the grass is dormant or growing very slowly can force new growth that is highly vulnerable to frost damage. Additionally, because the grass roots are not actively taking up nutrients, winter fertilization significantly increases the risk of nutrient leaching.

## **Navigating Florida's Summer Fertilizer Blackouts**

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One of the most distinctive aspects of lawn care in Florida is the widespread implementation of summer fertilizer bans, commonly known as blackout periods. These ordinances are designed to protect the state's fragile aquatic ecosystems. During the summer rainy season, heavy daily downpours can easily wash nitrogen and

phosphorus fertilizers off lawns and into storm drains, eventually reaching lakes, rivers, and coastal waters. This nutrient pollution is a primary catalyst for devastating algae blooms, including red tide, which deplete oxygen in the water and harm marine life.

In many Florida counties, including Martin, Broward, and Miami-Dade, these blackout periods typically run from June 1st through September 30th, though dates can vary by municipality. During this time, it is strictly prohibited to apply any fertilizer containing nitrogen or phosphorus to your lawn.

Preparing for the blackout period requires strategic planning. The goal is to provide your St. Augustine grass with enough sustained nutrition in late May to carry it through the summer months. Applying a heavy dose of a 100 percent slow-release nitrogen fertilizer right before the ban begins is a common and effective strategy. The polymer coating on these fertilizers ensures that the nitrogen is released gradually over the summer, keeping the grass fed without violating local ordinances.

## **Using Iron Supplements for Summer Green-Up**

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So, how do you keep your St. Augustine grass looking lush and green during the long summer blackout when nitrogen is off the table? The secret weapon is iron. Iron is an essential micronutrient that plays a vital role in chlorophyll production, the pigment that gives grass its green color.

Unlike nitrogen, iron does not stimulate rapid blade growth; it simply enhances the color of the existing grass. This makes it an ideal supplement during the summer months when you want a beautiful lawn without the extra mowing or the risk of nutrient runoff. Many local ordinances allow the application of iron and other micronutrients during the blackout period, provided the product contains zero nitrogen and zero phosphorus.

If your lawn begins to look pale or yellow during the summer, a foliar application of liquid iron (such as chelated iron or iron sulfate) can provide a rapid, dramatic green-up, often within 24 to 48 hours. However, it is important to understand that iron is not a replacement for nitrogen. While both deficiencies can cause yellowing, applying iron will not cure a lawn that is genuinely starving for nitrogen. Furthermore, be cautious when applying liquid iron, as it can permanently stain concrete driveways, sidewalks, and light-colored stonework. Always sweep or wash off any overspray immediately.

# Proper Application Techniques to Prevent Runoff

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Even outside of the blackout periods, applying fertilizer responsibly is a civic duty for every Florida homeowner. Proper application techniques not only maximize the benefit to your lawn but also minimize the environmental impact.

First, always use a broadcast spreader with a deflector shield. This shield prevents fertilizer granules from being thrown onto impervious surfaces like driveways, sidewalks, and streets. If any fertilizer does end up on the pavement, never wash it down the storm drain with a hose. Instead, use a broom or blower to sweep the granules back onto the lawn where they belong.

Second, establish a “Ring of Responsibility” around any bodies of water on or near your property. UF/IFAS recommends maintaining a buffer zone of at least 10 feet around lakes, ponds, canals, and streams where no fertilizer is applied. This vegetative buffer acts as a natural filter, capturing any stray nutrients before they can enter the water.

Finally, water management is intrinsically linked to fertilization success. After applying granular fertilizer, it is necessary to water it in to activate the nutrients and wash them off the grass blades and into the soil. However, you should only apply about a quarter-inch of water. Overwatering immediately after fertilization will simply wash the nutrients past the root zone and into the groundwater, rendering your efforts useless. Furthermore, never apply fertilizer if a heavy rainstorm or tropical system is in the forecast.

## Practical DIY Steps for Homeowners

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Before you reach for the phone to call a professional, there are several practical, hands-on steps you can take to maintain the health of your St. Augustine lawn.

Start by optimizing your mowing practices. St. Augustine grass prefers to be kept relatively tall, ideally between 3.5 and 4 inches. Mowing at this height encourages deeper root growth, shades the soil to reduce weed competition, and improves the lawn’s drought tolerance. Never remove more than one-third of the blade height in a single mowing, and always ensure your mower blades are sharp. Dull blades tear the grass rather than cutting it cleanly, creating jagged edges that invite disease.

Proper irrigation is equally important. Florida lawns generally require about half an inch to three-quarters of an inch of water per application, applied only when the grass shows signs of wilt (such as folded blades or a bluish-gray tint). Watering deeply and infrequently trains the roots to grow deeper into the soil in search of moisture, making the lawn more resilient.

Regularly inspect your lawn for signs of trouble. Walk your property weekly, looking for irregular brown patches, thinning areas, or signs of insect activity. Catching a chinch bug infestation or a fungal outbreak early can mean the difference between a quick localized treatment and a complete lawn replacement.

## When to Call a Professional Lawn Care Service

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While many homeowners successfully manage their own lawn fertilization, there are certain situations where the expertise of a professional is invaluable. St. Augustine grass is notoriously susceptible to specific pests and diseases that can decimate a lawn in a matter of weeks if not properly identified and treated.

You should consider calling a professional if you suspect a chinch bug infestation. These tiny, destructive insects suck the sap from the grass blades, causing expanding patches of dead, brown turf that are often mistaken for drought stress. Chinch bugs reproduce rapidly in the Florida heat, and over-the-counter insecticides are often ineffective against severe infestations.

Similarly, fungal diseases like large patch (formerly brown patch) and take-all root rot thrive in Florida's humid environment, particularly if the lawn has been overwatered or over-fertilized with nitrogen. Diagnosing these diseases correctly requires a trained eye, and professional-grade fungicides are usually necessary to halt their spread.

Furthermore, if you are struggling to interpret a complex soil test report, or if you simply do not have the time to navigate the intricate schedule of fertilization, blackout periods, and precise spreader calibration, a professional service can take the burden off your shoulders. They have the licensing, equipment, and local knowledge to ensure your lawn receives exactly what it needs, exactly when it needs it, while remaining fully compliant with all county and state regulations.

O'Hara Pest Control has been helping homeowners across Palm Beach, Broward, Martin, and St. Lucie counties since 1973. If you need expert help with fertilizing your St. Augustine grass, managing local blackout regulations, or treating stubborn pests

and diseases, call us at 561-655-9011 or visit [oharapestcontrol.com](http://oharapestcontrol.com) to schedule a free consultation. Let our decades of South Florida experience work for your lawn.