

Fertilizing Your North Florida Lawn

Lawn Fertilization Calendar – When To Apply Fertilizer

Lawns can benefit greatly from fertilization but can also be damaged or killed by applying too much fertilizer or applying fertilizer at the wrong time of year.

The following is a basic fertilizer schedule for lawns in North Florida maintained without the benefit of a soil test. However, it is always recommended to conduct a soil test before fertilizing in order to properly apply the rate of phosphorus (P) and potassium (K) required. For the spring application, particularly in North Florida, the recommended time to fertilize is mid- to late April or after the lawn has needed mowing twice, indicating actively growing grass that is able to take up the nutrients.

April → Complete Fertilizer (N, P, K)

June → Iron Only* (Iron Sulfate or Chelated Iron)

Sept → Complete Fertilizer (N, P, K)

Some lawns, such as Centipedegrass, may only need one fertilizer application in the spring. Others may not require an iron application during summer. Soil testing will provide specific recommendations tailored to your lawn. For more information on lawn fertilization, and to view a more detailed fertilizer calendar for specific lawn types in areas across Florida, visit *General Recommendations for Fertilization of Turfgrasses on Florida Soils* at <http://edis.ifas.ufl.edu/lh014>.

* Apply iron (Fe) to provide dark green color without stimulating excessive growth. For foliar application use ferrous sulfate (2 oz per 3-5 gal. water per 1000 sq ft). If the Fe is applied to an acidic soil, use one pound of iron sulfate per 1000 square feet. If the soil is calcareous, use the container label recommended rate of an iron chelate.

Selecting a Lawn Fertilizer

What do the numbers on the bag mean?

The three numbers printed in very large numerals on the bag represent the amounts of nitrogen (N), phosphorus (P as P₂O₅), and potassium (K as K₂O) in the bag.

These numbers represent the percentage of each nutrient or the number of pounds of each nutrient in a 100-pound bag. For example, a 16-4-8 fertilizer contains 16% nitrogen (N), 4% phosphorus (P), and 8% potassium (K). This also means that in a 100-pound bag of 16-4-8 fertilizer, 16 pounds is actual nitrogen (N), 4 pounds is actual phosphorus (P), and 8 pounds is actual potassium (K).

What fertilizer analysis is best for my lawn?

To determine the fertilizer analysis (N-P-K) that is best for your lawn, a soil test should be conducted. Soil testing is available through your local county Extension office. Where a soil test does not exist, we recommend using a 15-0-15, 10-0-10, 16-2-8, or similar fertilizer.

A general rule of thumb when selecting a lawn fertilizer is to choose a fertilizer containing a 1:1 to 2:1 ratio of nitrogen (N) to potassium (K). This means that the fertilizer contains equal amounts of N (1st number) and K (last number) OR no more than twice as much N as K. Also select a lawn fertilizer with zero P (2nd number), unless you have a soil test report that recommends adding this nutrient. This is because phosphorus tends to be prevalent in Florida soils and is often responsible for water pollution when over-applied.

What is the difference between slow-release and quick-release nitrogen fertilizer sources?

Some lawn fertilizers contain “slow-release” nitrogen, which means that the nitrogen is available to the lawn over an extended time, rather than all at once.

A slow-release fertilizer contains at least 30% - 50% water insoluble (slow-release) nitrogen.

A quick-release fertilizer contains less than 30% water insoluble (slow-release) nitrogen.

When following best management practices (BMPs) and applying fertilizer at the recommended rate for your lawn type, a slow-release fertilizer can be applied to the lawn in greater amounts per application with fewer applications per year versus a quick-release fertilizer which should be applied in smaller amounts per application, possibly with additional applications per year.

Calculating Percent Slow-Release Nitrogen (% SRN)

Look for a footnote under ‘Guaranteed Analysis’ located on the back of the fertilizer bag that indicates the percent of slowly available nitrogen (SRN). Divide this SRN by the total %N to determine the total %SRN. For example, a 15-0-15 with 12% SRN is a slow-release product containing a total of 80% SRN ($12 \div 15 = .80$ or 80%).

Fertilizer Application Rates – How Much Fertilizer To Apply

How much fertilizer to apply at any one time depends on four things:

- 1 – The amount of total nitrogen in the bag
- 2 – The total percent slow-release nitrogen (%SRN) in the bag
- 3 – The square footage of your lawn
- 4 – Whether the turf is growing in shade (turf in shade will need less fertilizer)

Regardless of the level of maintenance you desire, always adhere to these guidelines using the charts below followed by proper water management. Apply about ¼ inch of water to properly wash the fertilizer off the leaf blades and down to the roots, without washing it past the root zone. The use of fertilizers is not recommended if rainfall is forecast within the next 24 hours.

If the percentage of nitrogen in your bag of fertilizer does not match the following chart, use these formulas to calculate the amount of fertilizer to use per 1000 square feet of lawn:

For Quick-Release Products: $50 \div \%N =$ pounds of fertilizer per 1000 sq. ft.

For Slow-Release Products: $100 \div \%N =$ pounds of fertilizer per 1000 sq. ft.

If you are applying a **quick release fertilizer (containing less than 30% slow-release nitrogen)**, use the following chart which explains the approximate weight of fertilizer to use for a given lawn area in pounds (first number) and also in cups (second number) to deliver **½ lb N per 1000 sq ft** (the recommended rate for a single application of soluble or quick release fertilizer).

		% Nitrogen in Fertilizer Bag					
Area (sq ft)	6%	10%	12%	15%	16%	23%	27%
10	1.3 oz 3 TB	0.8 oz 1 ½ TB	0.7 oz 1 ½ TB	0.5 oz 3 ½ tsp	0.5 oz 1 TB	0.4 oz 2 ½ tsp	0.3 oz 2 ¼ tsp
50	6.6 oz 14 TB	4 oz ½ c.	3.3 oz 7 TB	2.7 oz 6 TB	2.5 oz 5 ¼ TB	1.7 oz 4 ½ TB	1.5 oz ¼ c.
100	13.3 oz 1 ¾ c.	8 oz 1 c.	6.7 oz 14 TB	5.3 oz ¾ c.	5 oz 10 ½ TB	3.5 oz 9 TB	3 oz ½ c.
1000	8.4 lbs 17 ½ c.	5 lbs 9 ½ c.	4.2 lbs 8 ¾ c.	3.3 lbs 7 ¼ c.	3.1 lbs 6 ½ c.	2.2 lbs 5 ½ c.	1.9 lbs 4 ¾ c.
1500	13 lbs 26 ¼ c.	7.5 lbs 14 ¼ c.	6.5 lbs 13 c.	4.9 lbs 11 c.	4.8 lbs 9 ¾ c.	3.3 lbs 8 ¼ c.	2.9 lbs 7 ¼ c.
3000	25.2 lbs 52 ¼ c.	15 lbs 28 ½ c.	12.6 lbs 26 c.	9.8 lbs 21 ¾ c.	9.4 lbs 19 ½ c.	6.6 lbs 16 ½ c.	5.8 lbs 14 ½ c.
5000	42 lbs 87 ¼ c.	25 lbs 47 ½ c.	21 lbs 43 ½ c.	16.4 lbs 36 ½ c.	15.8 lbs 32 ½ c.	11 lbs 27 ½ c.	9.8 lbs 24 ½ c.

If you are applying a **slow release fertilizer (containing at least 30-50% slow-release nitrogen)**, use the following chart which explains the approximate weight of fertilizer to use for a given lawn area in pounds (first number) and also in cups (second number) to deliver **1 lb N per 1000 sq ft** (the recommended rate for a single application of insoluble or slow release fertilizer).

		% Nitrogen in Fertilizer Bag					
Area (sq ft)	6%	10%	12%	15%	16%	23%	27%
10	2.6 oz 6 TB	1.6 oz 3 TB	1.4 oz 3 TB	1 oz 2 TB	1 oz 2 TB	0.8 oz 1.5 TB	0.6 oz 1.5 TB
50	13.2 oz 1 ¾ c.	8 oz 1 c.	6.6 oz 14 TB	5.4 oz 12 TB	5 oz 10 ½ TB	3.4 oz 9 TB	3 oz ½ c.
100	1 ½ lbs 3 ½ c.	1 lb 2 c.	13.4 oz 1 ¾ c.	10.6 oz 1 ½ c.	10 oz 1 ¼ c.	7 oz 1 1/8 c.	6 oz 1 c.
1000	16.8 lbs 35 c.	10 lbs 19 c.	8.4 lbs 17 ½ c.	6.6 lbs 14 ½ c.	6.2 lbs 13 c.	4.4 lbs 11 c.	3.8 lbs 9 ½ c.
1500	26 lbs 52 ½ c.	15 lbs 28 ½ c.	13 lbs 26 c.	9.8 lbs 22 c.	9.6 lbs 19 ½ c.	6.6 lbs 16 ½ c.	5.8 lbs 14 ½ c.
3000	50.4 lbs 104 ½ c.	30 lbs 57 c.	25.2 lbs 52 c.	19.6 lbs 43 ½ c.	18.8 lbs 39 c.	13.2 lbs 33 c.	11.6 lbs 29 c.
5000	84 lbs 174 ½ c.	50 lbs 95 c.	42 lbs 87 c.	32.8 lbs 73 c.	31.6 lbs 65 c.	22 lbs 55 c.	19.6 lbs 49 c.