ENH979

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Homeowner Best Management Practices for the Home Lawn[1]

Laurie E. Trenholm[2]

Everyone enjoys the look of a nice healthy lawn. Not only do lawns increase the value of a property, they cool the air, combat glare and noise, and reduce soil erosion. Most importantly, a healthy lawn actively filters and traps sediment and pollutants that could otherwise contaminate surface waters and groundwater.

It is very important that homeowners use Best Management Practices (BMPs) when maintaining their lawns. Failure to follow BMPs can result in pollution of Florida's surface or groundwater resources. To learn more about a healthy, Florida-Friendly lawn, please read these easy-to-follow tips:

Lawns Get Hungry

All lawns benefit from regular fertilizer applications throughout the growing season. Applying the proper amount of fertilizer for your grass species will help to promote a vigorous, healthy lawn that can outcompete weeds.

In June of 2007, the Florida Department of Agriculture and Consumer Services (FDACS) passed a rule regulating labeling requirements for urban turf (home lawn) fertilizers. This rule is intended to reduce potential non-point source pollution that might result from application of excess fertilizer to lawns. The rule says that only fertilizers containing low or no phosphorus (phosphorus is represented by the second number on the bag) can be sold for use on lawns. The same rule limits the total annual amount of phosphorus that can be applied to a home lawn. It also limits nitrogen application amounts to the rates recommended in this fact sheet, which vary according to the species of turf that make up your lawn and your location in the state.

No matter what kind of grass you have or where you live in the state, you should apply only up to 1 lb of nitrogen for every 1000 square feet of lawn each time you apply fertilizer, if that fertilizer has 30 percent or more slow-release content. If the fertilizer has 15–30 percent slow-release content, apply up to .5 lb of nitrogen per 1000 square feet with each application. You should not exceed the application rate of 1 lb of nitrogen per 1000 square feet at any one time.

The new labeling requirements make it easier for homeowners to find lawn fertilizers with both

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2. Laurie E. Trenholm, Assistant Professor, Extension Turfgrass Specialist, Environmental Horticulture department, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.

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slow-release nitrogen and low or no phosphorus. Slow-release nitrogen may be safer for your lawn and the environment, and it will provide a longer-lasting response from the grass. See Tables 1a and 1b for the recommended fertilizer rates for your lawn's square footage and your fertilizer anaylsis. The low phosphorus will not be harmful for most lawns in Florida because most Florida soils are already high in phosphorus, and turf requirements for this nutrient are generally low.

It is important to test your soil to determine phosphorus levels. Check with your county Extension Office for information on how to submit soil samples for phosphorus testing.

In south Florida, you can apply fertilizer throughout the year. In north and central Florida, wait until the danger of frost has passed before you apply fertilizer in the spring. Your fertilizer application should be around the end of September in north Florida and mid-October in central Florida. Do not apply fertilizer if heavy rainfall is forecast in the next 24 hours.

If you have a small strip of lawn that adjoins impervious surfaces, such as sidewalk or pavement, use a spreader equipped with a deflector shield (Figure 1) that will spread the fertilizer in a 180∫ arc to keep it away from the paved area. Use the same shield when you are fertilizing areas next to water bodies. Leave a 10-ft strip of turf around the water body unfertilized to avoid polluting the water.

Figure 1. Deflector Shield

If you spill fertilizer on the driveway or sidewalk, sweep it up and put it back in the bag. Always sweep up spilled fertilizer rather than rinsing it away, even when the spill is on the lawn. Spilled fertilizer easily finds its way down storm drains or into the ground and from there into the water supply.

Store your unused fertilizer where it will stay dry. Do not store it next to pesticides, fuel, or solvents.

Let the Mowing Begin!

Mowing may seem like the bane of your existence during the summer months, but it is actually one of the most important home-lawn management practices. Follow these suggestions for a healthy, happy lawn:

- **Mow at the highest height for your grass species.** For St. Augustinegrass and bahiagrass, this is 3.5–4 inches. If you have St. Augustinegrass "dwarf" cultivars 'Delmar' or 'Seville', mow at 2–2.5 inches. Mow centipedegrass at 1–2 inches.
- **Never remove more than 1/3 of the leaf blade at any one time.** Cutting too much of the leaf blade can stress your lawn and leave it susceptible to insect or disease invasion. If you miss a mowing session, raise the mower height and bring the grass back down to the recommended level gradually over the next few mowing sessions.
- **Leave grass clippings on the lawn.** They do not contribute to thatch, and actually return a small amount of fertility and organic matter back to the lawn.
- **Keep your mower blades sharp.** Dull mowers tear the leaf blades. This makes the lawn look bad and leaves it susceptible to insect or disease invasion.
- **Do not mow your lawn when it is wet.** This is dangerous for you, tough on the mower, and bad for the grass.

Irrigation or Irritation?

More lawns are damaged by improper irrigation practices than any other single cultural practice. Train your grass to be more drought tolerant using the following methods:

- **Irrigate less frequently.** Each time you water, water for a slightly longer time. This will help train your roots to grow deeper in the soil, which will in turn make your lawn more drought tolerant. Grasses irrigated in this manner will have a better chance of surviving watering restrictions.

- **Turn your automatic sprinkler system to the "off" position**, and turn it on when your lawn shows signs of needing irrigation. Adjust your timer seasonally. Irrigation frequency will vary depending on where you are in the state, as well as the amount of shade in the landscape, soil type, etc. For more information, please refer to How to Calibrate Your Sprinkler System. Remember that functional rain shut-off sensors are required by Florida law on all irrigation systems installed since 1991.

- **Irrigate your lawn as-needed, rather than on a schedule.** A lawn is ready for watering when the leaf blades show at least one of the three wilt signs: when leaf blades start to fold in half lengthwise, when the grass takes on a bluish cast, or when footprints remain visible in the lawn long after being made. Irrigate when about 50 percent of the lawn shows one of these signs, unless rain is forecast in the next 24 hrs.

- **In most parts of Florida, irrigate to apply 1/2– 3/4 inch of water.**

  - To determine how long you need to run your irrigation system to apply 1/2– 3/4 inch of water to the whole lawn, place straight-sided cans around the perimeter of each irrigation zone. Turn on the irrigation system and monitor the cans to see how long it takes to fill them to 1/2– 3/4 inch. Time irrigation intervals for the zones accordingly

  - If you are in an area with very sandy soil, you may need to apply the higher amount of water.

  - Heavier clay soils may only need the 1/2-inch rate.

  - In southeast Florida and the Keys, where soil depths are shallow, you may only be able to irrigate 1/4 inch to saturate the soil.

  - If application of these amounts results in runoff, reduce the amount of water you apply. In some soils it may be necessary to apply half of the amount needed, let it percolate through the soil, and then apply the remaining water a short time later.

- In north or central Florida, irrigate every 2–3 weeks during the winter months, even if your grass is dormant. The roots are still viable, and irrigating through the winter will help the grass green up more quickly in the spring.

- Irrigate around sunrise or in the early morning hours. The leaf blades must dry out fully during the day to ward off disease.

Weed Woes

A healthy lawn that is properly fertilized, mowed, and irrigated will typically outcompete most weeds. However, some degree of weed control is often required to supplement even the best cultural practices.

Some weeds can be chemically controlled after they have emerged. Others, particularly grassy weeds, are better controlled preemergence. To control the weeds in your lawn before they emerge, you need to know where they are and what they are. You then need to select the right product and to apply it at the right time.

For preemergence crabgrass control, look for products containing pendimethalin (available under multiple brand names). Apply this at label rates around the first of February in south Florida, mid-February in central Florida, and the first of March in north Florida. Note that there are no chemicals currently available for postemergence control of grassy weeds in St. Augustinegrass.

For St. Augustinegrass lawns, atrazine is a commonly used herbicide for control of many

broadleaf weeds. Be careful not to apply atrazine when temperatures are high (greater than 85∫) because it may injure the grass.

Please refer to Table 1 and Table 2 below to calculate the correct fertilizer application rates for your size lawn and for different types of fertilizer.

Please refer to Weed Management in Home Lawns for more information. Whenever you apply chemicals, remember that *the label is the law* and that the directions must be followed!

The best defense against weeds or other lawn problems is to grow a happy, healthy, Florida-Friendly lawn by following the fertilization, mowing, and irrigation tips described above.

HAPPY GROWING!!!

Table 1. Recommended application rates for turfgrass fertilizers to Florida lawns: 30 percent or more slow-release nitrogen.

Use this table to match the size of your lawn to the percentage of nitrogen (N) in your fertilizer to find the amount of fertilizer you need to apply. If you have a bahiagrass lawn, apply this amount of fertilizer about twice a year no matter where you live in the state. For centipedegrass, apply about once a year in north Florida and once or twice a year in central and south Florida. For St. Augustinegrass or zoysiagrass, apply about two or three times a year in north and central Florida and three or four times a year in south Florida. UF/IFAS recommends soil testing for phosphorus content before any P fertilizer is applied.

	6% N	**10% N**	**12% N**	**15% N**	**16% N**	**23% N**	**27% N**
1,000 ft^2	16.5 lbs	10 lbs	8.5 lbs	6.5 lbs	6 lbs	4.5 lbs	4 lbs
1,100 ft^2	18.5 lbs	11 lbs	9.5 lbs	7 lbs	7 lbs	5 lbs	4 lbs
1,200 ft^2	20 lbs	12 lbs	10.5 lbs	8 lbs	7.5 lbs	5 lbs	4.5 lbs
1,300 ft^2	22 lbs	13 lbs	11.5 lbs	8.5 lbs	8 lbs	5.5 lbs	5 lbs
1,400 ft^2	23.5 lbs	14 lbs	12.5 lbs	9 lbs	9 lbs	6 lbs	5 lbs
1,500 ft^2	25 lbs	15 lbs	13.5 lbs	10 lbs	9.5 lbs	6.5 lbs	5.5 lbs
2,000 ft^2	33.5 lbs	20 lbs	17 lbs	13 lbs	12 lbs	9 lbs	8 lbs
2,500 ft^2	41.5 lbs	25 lbs	21 lbs	16.5 lbs	15.5 lbs	11 lbs	9.5 lbs
3,000 ft^2	50 lbs	30 lbs	25.5 lbs	19.5 lbs	18 lbs	13 lbs	12 lbs
3,500 ft^2	58 lbs	35 lbs	30 lbs	23 lbs	21.5 lbs	15.5 lbs	13.5 lbs
4,000 ft^2	66 lbs	40 lbs	34 lbs	26 lbs	24 lbs	18 lbs	16 lbs
4,500 ft^2	74 lbs	45 lbs	38 lbs	29.5 lbs	27.5 lbs	20 lbs	17.5 lbs
5,000 ft^2	82 lbs	50 lbs	42.5 lbs	33 lbs	31 lbs	22 lbs	19 lbs

*These recommendations assume use of a properly calibrated spreader. See www.yourfloridalawn.ifas.ufl.edu for instructions on calibrating your spreader.

Table 2. Recommended application rates for turfgrass fertilizers to Florida lawns: 15–30 percent slow-release nitrogen.

Use this table to match the size of your lawn to the percentage of nitrogen (N) in your fertilizer to find the amount of fertilizer you need to apply. If you have a bahiagrass lawn, apply this amount of fertilizer about four times a year no matter where you live in the state. For centipedegrass, apply about twice a year in north Florida and two to four times a year in central and south Florida. For St. Augustinegrass or zoysiagrass, apply about four to six times a year in north and central Florida and six to eight times a year in south Florida. UF/IFAS recommends soil testing for phosphorus content before any P fertilizer is applied.

	6% N	**10% N**	**12% N**	**15% N**	**16% N**	**23% N**	**27% N**
1,000 ft^2	8.25 lbs	5 lbs	4.25 lbs	3.25 lbs	3 lbs	2.25 lbs	2 lbs
1,100 ft^2	9.25 lbs	5.5 lbs	4.75 lbs	3.5 lbs	3.5 lbs	2.5 lbs	2 lbs
1,200 ft^2	10 lbs	6 lbs	5.25 lbs	4 lbs	3.75 lbs	2.5 lbs	2.25 lbs
1,300 ft^2	11 lbs	6.5 lbs	5.75 lbs	4.25 lbs	4 lbs	2.75 lbs	2.5 lbs
1,400 ft^2	11.75 lbs	7 lbs	6.25 lbs	4.5 lbs	4.5 lbs	3 lbs	2.5 lbs
1,500 ft^2	12.5 lbs	7.5 lbs	6.75 lbs	5 lbs	4.75 lbs	3.25 lbs	2.75 lbs
2,000 ft^2	16.75 lbs	10 lbs	8.5 lbs	6.5 lbs	6 lbs	4.5 lbs	4 lbs
2,500 ft^2	20.75 lbs	12.5 lbs	10.5 lbs	8.25 lbs	7.75 lbs	5.5 lbs	4.75 lbs
3,000 ft^2	25 lbs	15 lbs	12.75 lbs	9.75 lbs	9 lbs	6.5 lbs	6 lbs
3,500 ft^2	29 lbs	17.5 lbs	15 lbs	11.5 lbs	10.75 lbs	7.75 lbs	6.75 lbs
4,000 ft^2	33 lbs	20 lbs	17 lbs	13 lbs	12 lbs	9 lbs	8 lbs
4,500 ft^2	37 lbs	22.5 lbs	19 lbs	14.75 lbs	13.75 lbs	10 lbs	8.75 lbs
5,000 ft^2	41 lbs	25 lbs	21.25 lbs	16.5 lbs	15.5 lbs	11 lbs	9.5 lbs

*These recommendations assume use of a properly calibrated spreader. See www.yourfloridalawn.ifas.ufl.edu for instructions on calibrating your spreader.