

Amending Soil



Start with a soil test!

You don't know what your lawn *needs* without one! Test kits are available from your local Cooperative Extensions, USDA-NRCS, Soil and Water Conservation Districts, and online at umaine.edu/soiltestinglab/home/kit-request/.



Fertilize Smarter

- **Only use what your soil needs:** Follow your soil test recommendations to build healthy soil and save time and money! Use phosphorus-free fertilizer unless establishing seed. **See the back page for instructions on how to calculate your fertilizer.**
 - If your soil needs **nitrogen**, add blood meal, corn gluten, cottonseed meal, or soybean meal.
 - If your soil needs **phosphorus**, add bone meal or aged/composted manure.
 - If your soil needs **potassium**, add greensand, kelp meal, or wood ash.
- If using conventional fertilizer, use a 60% to 70% slow release/water insoluble nitrogen source.
- **Time it right:** The best time to add nutrients is between August 15th and September 15th.

Fertilizer Alternatives

- **Leave your grass clippings:** Clippings are free and return important nutrients back to the soil.
- **Plant white clover:** Clover takes nitrogen from the air and adds it into the soil!

Change your pH

- Grass needs a pH **between 5.5 and 7** to thrive (slightly acidic).
- If your pH is **greater than 7**, add sulfur in the spring to lower it, and if it is **less than 5.5**, add lime in the fall before the first frost to raise it.

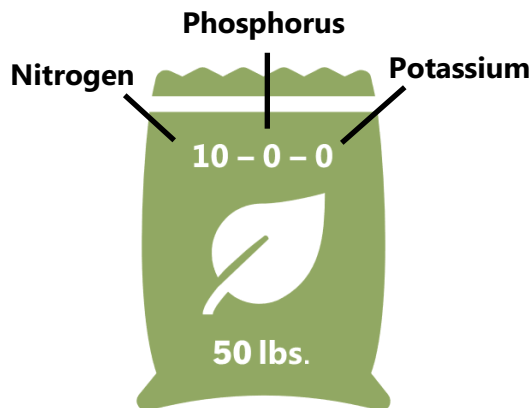


Mix It In

Soil amendments work best when they're mixed into the top two to three inches of soil. Try to time your pH and/or fertilizer applications between aerating and topdressing.

Ordinance Check

Check your municipal ordinances for fertilizer use restrictions and setbacks that are in place to protect water quality.



Applying Fertilizer

If your soil test indicates your soil needs fertilizer, here's how to match the recommend ratio.

As an example, let's say you're looking at an 18 lbs. bag of fertilizer with 22-4-8 on the front. This means the bag is 22% nitrogen (3.96 lbs.), 4% phosphorus (0.72 lbs.), 8% potassium (1.44 lbs.), and the rest of the bag (66% or 11.88 lbs.) is filler.

If your **soil test** says you need 2 lbs. of nitrogen per 1,000 sq. ft, use the following equation to determine how much fertilizer to spread:

2 lbs. nitrogen based on soil test ÷ 0.22 (% nitrogen in bag) = Apply 9 lbs. of the 22-4-8 fertilizer* per 1,000 sq. ft. to achieve desired nitrogen levels.

*If you leave grass clippings, only apply half the calculated amount of fertilizer and apply it in the fall.

Sometimes it may be difficult to find bagged fertilizer that has the right ratio to meet your soil nutrient needs. In these situations, consider buying fertilizer with only one nutrient to ensure you aren't over or under applying another nutrient.

Know the Ratio

Fertilizer bags list the percentage of the bag weight for nitrogen, phosphorus, and potassium.

Spread Better

Calibrating your spreader properly and applying at the right time will ensure you're applying the correct rate and reduces the risk of fertilizer ending up in local water bodies.

- Use a drop spreader that spreads much more precisely than a broadcast spreader.
- Fill the spreader on a hard surface.
- **All spills should be swept up immediately.**
- Reduce spreader settings by half and apply north to south, then east to west to evenly cover lawn.
- Walk at a steady pace to ensure even distribution.
- When turning with the spreader, make sure it is closed and on the yard.
- Avoid fertilizing before rainstorms or on already-saturated soils. However, fertilizer should be gently watered in after application to prevent grass burning.

Contact Cumberland County Soil & Water Conservation District for assistance understanding your soil test results and fertilizer recommendations.

