

Back Messages: Planting Home Lawn

1. Apply full lime recommendation and thoroughly mix into the soil four to six inches deep. Use a high quality agricultural ground limestone product to meet the lime recommendation on this report. Manufacturers of agricultural ground limestone products provide a number called the calcium carbonate equivalent, or CCE, on the label. CCEs with high numerical values (close to 100 or above) indicate a pure lime source (greater ability to neutralize soil acidity). The amount of lime recommended on this report is based on an agricultural ground limestone with a CCE of 100. If your lime source is close to or equal to 100, you don't need to adjust the recommended amount. In the event that you use a lime source with a CCE well below 100, use the following formula to adjust the required amount.

$$\text{Actual liming material required} = \frac{\text{Soil test recommendation in lbs of lime/1000 square feet} \times 100}{\text{CCE of liming material}}$$

Example Only:

Soil Test Recommendation: Apply 75 lbs lime/1000 square feet

CCE on label: 80 percent

$$\begin{aligned} \text{Actual liming material required} &= (75 \text{ lbs of lime}) \times 100 \\ &\quad 80 \\ &= 94 \text{ lb liming material/1000 square feet} \end{aligned}$$

2. If organic matter test was requested and organic matter recommended, thoroughly mix organic matter into a four to six inch soil depth. Sphagnum peat and peat humus typically contain high amounts of organic matter (> 80 %) and will usually meet organic matter requirements when incorporated at the rate recommended on the soil test report. A good quality compost can also be used as an organic amendment; however, most composts contain lower amounts of organic matter than peats. Therefore, you may need to add greater amounts of compost to meet soil test organic matter recommendations. For more information on using composts as organic amendments in new turf plantings, refer to the publication, "Using Composts to Improve Turf Performance". This publication is available from Penn State Cooperative Extension offices or the Publication Distribution Center, The Pennsylvania State University, 112 Agricultural Administration Bldg., University Park, PA 16802.

3. Thoroughly mix phosphate and/or potash into a four to six inch soil depth.

4. Grade and finish rake for seeding. Apply starter fertilizer just prior to seeding.

5. In some cases, turfgrass seed is planted into soils that have not been tilled. In such cases, incorporating large amounts of lime, fertilizer, and organic matter into soil four to six inches in depth is not possible. When planting into soils that have not been tilled, do not exceed 100 lb lime/1000 square feet; 5 lb P₂O₅/1000 square feet (9 lb of 0-46-0/1000 square feet or 22 lb of 0-23-0/1000 square feet) or 2 lb K₂O/1000 square feet (4 lb 0-0-50/1000 square feet). The full recommended rate of starter fertilizer can be applied to the soil surface with this type of planting.

6. Get the most out of your fertilizer while protecting water resources

The following are suggestions for maximizing the efficiency of your fertilizer program, while minimizing nutrient losses to water resources through leaching and runoff.

- Apply nitrogen, phosphorus, potassium, and lime according to soil test recommendations. Do not apply more than is needed as this may harm the turf and contribute to leaching and runoff.
- On turf, apply fertilizer in two or three applications over the growing season so as to meet the needs of your turf at the appropriate time of year (mid to late spring, late summer, and late fall).
- Returning clippings to lawns can cut nitrogen fertilizer use by up to one-third.
- Keep fertilizer on the lawn and not on pavement. Shut off your spreader when moving across drive ways or maintenance roads, and blow or sweep granules from pavement onto the turf. In small lawns enclosed by sidewalks and driveways, use a drop spreader for greater accuracy.
- Do not apply fertilizer to lawns under summer dormancy or on frozen surfaces in winter.
- Fill and empty fertilizer spreaders in an area where spills can be easily cleaned up. Use your spilled fertilizer; don't wash it into the street or storm sewers.