



## FERTILIZATION OF TALL FESCUE

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Productive pastures and hay fields require adequate levels of nutrients, which can only be assured by taking annual, representative soil samples to determine the soil pH, potassium, and phosphorous status of the soil. Fertilizer required will vary greatly with year and soil types. Any applications not based on soil test recommendations may either be over-applications resulting in needless expense or under-applications resulting in reduced yield. As with all inputs, fertilizer should be applied as uniformly as possible, at the proper time, and in the proper amounts.

Fertilizer applications should coincide with periods of crop growth. Applications at other times may stimulate weed growth and disease development. Tall fescue is most productive in the spring, typically showing rapid growth from April through early June, depending on moisture and temperature conditions, and also some varietal differences, as noted in the first section. Little growth occurs in the summer, and fertilizer applications during this time favor the warm-season species. There is a second-growth period in the fall, beginning with cooler, night temperatures usually in mid-September, and continuing until the first hard freeze.

Another factor influencing fertility is whether the pasture is used for grazing, hay, or a combination of both. The more hay that is taken off the pasture the more critical it will be to monitor the fertility level of the pasture and the more fertilizer that will have to

be added to replace nutrients removed by the hay. To the extent that the pasture is grazed, a portion of the nutrients will be returned in the animal manure.

### Tall Fescue Alone

A soil pH of at least 6 is necessary for good crop growth. Lime in amounts recommended by soil tests may be applied at any time that it fits in the management scheme.

Apply soil test recommended amounts of phosphorus and potassium in late August to mid-September. These should be amounts to maintain a medium soil test level. If potassium level is very low and over 70 lbs per acre are recommended, consider a split application since potassium is quite soluble and subject to leaching.

Nitrogen is best applied on an as-needed basis in at least two applications during the growing season. In general, 200 lbs of nitrogen per acre should be applied each year where the forage is grown for hay and about half that amount where the tall fescue is grazed. The nitrogen should be split into two applications; one with the phosphorus and potassium in the late summer-early fall and the second in the early spring just before the beginning of spring growth. It is best to

apply nitrogen to tall fescue that is shorter than 2 to 3 inches. Tall fescue in this height range is physiologically most capable or ready to make use of the nitrogen. Do not apply nitrogen to tall fescue in the summer. It will stimulate weed problems and stress the tall fescue.

### **Tall Fescue-Clover Mixtures**

Apply lime to tall fescue-clover mixtures (at any time of the year) to maintain a soil pH of 6.5. The higher pH than for pure grass stands favors the clover.

Phosphorus and potassium should be applied in late August to mid-September at soil test recommended

amounts. This is the same as the recommendations for the pure tall fescue stands. However, it should be noted that the phosphorus levels are more important to the clover than to the tall fescue, and, if deficient, will cause the clover to rapidly be lost from the stand.

If clover represents more than 33 percent of the stand, nitrogen fertilization may be reduced or eliminated. In stands with less than 33 percent clover, fertilize with nitrogen as recommended for pure tall fescue pastures. Keep in mind that nitrogen applications will favor the grass and will shift the pasture to a greater proportion of grass.