

# Spring Pasture Management Pays Off in the Long Run

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**W**ith spring approaching and feed supplies dwindling, the temptation to graze cattle is high. However, a spring pasture preparation plan is critical to maintaining productive, cost-saving pastures. Once frost is out, it is a good time to begin thinking about a pasture preparation plan for the grazing season. Start by preparing the soil for a productive season.

Soil testing is critical for managing nutrients for optimum forage yields and livestock carrying capacity. Begin by probing samples 6" deep. Sample at least 10 locations per 20 acres and mix into a composite sample. Once you have samples collected, send them to a reputable soil analysis lab to test for pH, nitrate-nitrogen ( $\text{NO}_3 - \text{N}$ ), phosphorous (P), and potassium (K). Results will include fertilizer recommendations to meet the soil fertility and forage yield goals for that particular unit. When amending fertility, pay special attention to the pH in your pasture.

When pH is  $>7.0$ , nutrients such as copper, zinc, manganese, and iron are unavailable for plant uptake. When pH is  $<6.5$ , nutrients such as nitrogen (N), K, P, and calcium are unavailable. When nutrients are unavailable, the plant is essentially starving. Applying agricultural lime to amend pH, at the rate recommended by your soil test, is the most effective way to remedy soil pH issues.

For primarily grass pastures, the largest nutrient application will be N. Consider dividing the total N recommendation and apply the first half at the beginning of the grazing season and the second half in mid- to late June. Research has shown split N applications on grass pastures will increase yields as much as 30%. For pastures containing legume species, K will likely be one of the larger fertilizer amendments needed. Legumes need K to survive the winter, so consider applying K to pastures in the fall as well.

Spring is a good time to work on controlling pasture weeds. Young, fast growing plants are easy to control with mechanical and herbicide treatments. However, broad-scale herbicide treatment of undesirable plants is generally not recommended, especially if legumes are present. Spot treatment with herbicides or mechanical methods are much more economical and environmentally sound strategies for controlling undesirable species.

Grazing management is also a key component of managing pastures. Spring turn-out and the fall gather are the two most critical times in managing pastures for the long term. A good rule of thumb is to wait until grass plants have four leaves and are 6-8" tall before turning cattle out. Research has shown turning cattle out on grass pastures before the 4-leaf stage can reduce pasture yields by 30% in a single season. It is also important to consider the best time to pull cattle off pastures in the fall to maintain quality grass and legume species. Cattle should be removed at least 30 days prior to the average killing frost date. Additionally, at least 4" of residual stubble should remain to avoid winterkill and late spring green-up.

A spring pasture management plan will pay big dividends over the long term for perennial grass and legumes. Consult your local agronomist or Extension personnel to assist with soil testing and fertilizer recommendations to make sure recommendations are understood and followed properly. Controlling weeds and following grazing management protocols will ensure profitable pasture production for years to come.