## **Pasture Management Tips To Improve Profitability**



## DR. GARY BATES

**KNOXVILLE, TENN.** aving high quality, productive pastures is key to a successful cow-calf operation. Producers often take pastures for granted; sometimes they may not think about their pastures until there is a severe drought

or other crisis. Here are a few things that producers can do to improve the profitability of the forage component of their farms.

**1. Be Efficient With Fertilizer.** Fertilizer is a significant expense. Be as efficient as possible with the dollars spent on fertilizer.

**a.** Fertilize and lime according to soil test. Don't apply more potash and phosphate than needed. A soil test will show the pH of the soil, indicating if any lime is needed. Fertilizer is used the most effiabove 6.0. If pH is below 6.0, some of the fertilizer applied is not available to the plant.

**b.** Apply nitrogen only when soil moisture is adequate for plant growth. If soil moisture is limiting, you will not get the best utilization of nitrogen. Both water and nitrogen are needed for forage production. Moisture usually is not limiting for the spring growth of cool-season grasses. But if you are using warm-season grasses like bermudagrass, or trying to stock-pile tall fescue in the fall, only apply N fertilizer if soil moisture is adequate.

**c.** Use clover to replace spring N applications. Research has shown that tall fescue/red and white clover mixtures can yield as much as tall fescue fertilized with 60 lb. N per acre. Take advantage of these clovers and seed them into tall fescue. It will reduce the fertilizer bill, as well as improve the quality of the pasture.

**2. Keep Weeds Under Control.** Weeds reduce the yield and quality of the forage. Letting weeds grow unrestricted in a pasture for a couple of years can severely reduce the productivity of a field. If a weed problem is present, find out what weed it is and the best herbicide program to control this weed.

**3. Develop a Strategy to Deal With the Endophyte in Tall Fescue.** The endophyte Neotyphodium ceoenophialum causes millions of dollars in reduced performance by cattle in Tennessee each year. This fungus cannot be seen on the outside of the KY-31 tall fescue plant, but its presence inside the plant causes animals to reduce their intake, have poor reproductive rates, run elevated body temperatures, and gain less than animals that aren't grazing toxic tall fescue. If grazing KY-31 tall fescue, the cattle are suffering from some level of toxicosis, whether realized or not. There are several ways to deal with this issue.

**a.** Use MaxQ tall fescue. This fescue variety is infected with a nontoxic form of the endophyte. This nontoxic endophyte helps the tall fescue be persistent under drought and grazing conditions without causing toxicosis.

**b.** Use red and white clover with KY-31 tall fescue. Research has shown that using clovers with tall fescue will not eliminate toxicosis, but it will reduce it by as much as 50 percent.

**c.** Use other cool-season grasses like orchardgrass. Orchardgrass stand life will not be as long as with KY-31 tall fescue or MaxQ, so replanting every few years may be necessary.

**4. Graze Pasture Efficiently.** It doesn't make sense to spend money producing forage and then do a poor job utilizing it. Rotational grazing minimizes waste, since animals are concentrated on smaller areas and forced to graze all of the forage before moved. If they cannot graze all of the pastures, some of the fields can be used as hay. As forage growth slows during summer, rotating the animals among the fields will prevent pastures from being overgrazed and help prevent stand loss.

Following these simple steps will improve pasture efficiency on most farms across the state. Being efficient with resources is key to profitability.  $\Delta$ 

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