

# Managing Fertilizer First Step To Maximum Forage Production

HOPE, ARK.

**F**all, winter and early spring are ideal times to conduct many pasture management chores that will pay big dividends in forage quality, animal growth and weed control next summer, says Gerald Alexander, Hempstead County extension agent for the University of Arkansas Division of Agriculture.

“Good pasture fertility management is the first step toward maximizing forage production and animal production,” he said. “Fall, when most pastures are going dormant, is a great time to lay the framework for next year’s forage production.”

Nitrogen fertilization is not recommended at this time of year, unless the pasture has been overseeded with a winter annual for grazing. Otherwise, wait until spring to apply nitrogen fertilizers.

“If you haven’t soil tested your pastures recently, this is a good time to do so,” he said. “A soil test now will allow you time to apply any recommended lime to bring soil pH into the optimum range before forage growth begins next spring.”

A soil test will also allow one to apply any recommended phosphorus and potassium with little risk of losing either of these nutrients to the environment.

“This way, the only nutrient that will be needed next spring will be nitrogen,” Alexander said.

One additional tip about nitrogen: Because

prices have risen, it has been hard to determine a good value.

“Just remember to compare apples to apples when you buy nitrogen fertilizers,” he said. “Figure the cost per pound of nitrogen from all potential sources before making your purchase.”

For example, if ammonium nitrate is selling for \$450 per ton and urea is selling for \$525 per ton, which is the better buy?

Ammonium nitrate is 34 percent nitrogen, and urea is 46 percent nitrogen. A ton of ammonium nitrate would provide 680 pounds of nitrogen (2,000 pounds X 0.34 = 680) and a ton of urea would provide 920 pounds of nitrogen (2000 pounds X 0.46 = 920). When we divide \$450 by 680, we find that a pound of nitrogen from ammonium nitrate costs \$0.66 per pound while a pound of nitrogen from urea costs \$0.57 per pound (\$525/920).

“Fall also is the time to consider winter weed control for thistles,” Alexander said. “Thistles are biennial plants, requiring two years to complete their life cycle.”

In the first year, the seeds will sprout in the spring or early summer and remain in a flat, rosette growth form. They live through the winter in this rosette form and begin their reproductive stage the second spring. Applying herbicides while the thistle plant is still in the rosette stage will enable a producer to eliminate the majority of the thistle problem. Once the thistle begins to flower, herbicides are not as effective. Δ