

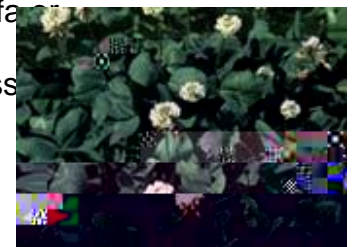
Nitrogen Management on Pasture

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Grasses have a high demand for nitrogen (N). Grass hay trials have shown that some grasses will respond in yield up to 300 and even 400 lbs. of actual N per acre per year. This depends on the cost of N fertilizer and the value of the hay crop. For hay, this is generally between 100 and 200 lbs. N/acre split two to four times per year, depending on the particular grass species, soil type and weather conditions. For pasture, the decision to apply N becomes more complicated. Here are a few points to consider when making N fertilizer decisions.



- x A Management Tool- Think of N fertilizer as a short-term management tool for producing temporary increases in pasture dry matter. Applied to grass usually shows an immediate response and then it is gone. You only want to use it on certain areas for certain times of the year.
- x Stocking rate - A farm should consider if they need the extra forage that will be produced by adding N fertilizer. Some farms have more land than their animals need and adding N would just add to the pasture waste. On the other hand, if the operation is stocked right at that point where most summer production becomes limiting, then N fertility may be an option to increase forage dry matter.
- x Legume content- Yields from legume forages such as clover, alfalfa and birdsfoot trefoil are usually not limited by a lack of nitrogen fertilizer. If pasture has over 30% legume, it is less likely to see a yield increase by adding additional N fertilizer. In fact, continual additions of N will cause a



To apply 50 lbs. of N, divide by the % N in the formula. For instance, urea is 46%; therefore you would need to apply 109 lbs (50 divided by 0.46) to get 50 lbs. N per acre

x When to Apply N and When to Graze- If the pasture