Adding Legumes to Pastures

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One of the best management practices that beef producers can utilize is the addition of legumes into their pastures. For example, a stand of 30% clover will provide all the nitrogen needed to allow the grass component to yield at its optimum. This saves the producer the cost of supplementing nitrogen. Legumes are also higher in protein and other minerals, thus providing a healthier diet that can lead to improved gains, improved body scores and better rebreeding.



Legumes can also provide much needed forage during the summer months when grass growth slows. Legumes can offset the summer slump of grasses, which can allow animal numbers to maintain. Since most pastures have fescue as the grass component, having a legume included can help deter the effects of fescue endophyte, leading to reduced weight gain and conception rates.

Frost seeding is the usual method that clover is introduced into pasture and now is the time to consider that. The cost of clover seed is much cheaper than applying supplemental nitrogen to the pasture with the same results. Many producers who apply nitrogen in the spring aren't getting the most of their dollars. Rarely do pastures need growth encouragement in the spring. Pastures are more often lacking in the summer, when growth slows down and that time of year is when inter-seeded legumes can really provide a benefit.

The usual recommendation is to frost seed 3-4 pounds of inoculated red clover each year or 6-8 pounds every other year. If you are using white or ladino clover a 1-2 pound rate will be sufficient. The white and ladino should last much longer than the red, so annual reseeding shouldn't be necessary once they become established, although they will not persist indefinitely. The past few years' excessive rains have been hard on legumes. Cattle traffic on excessively wet pastures hasn't improved legume stand either. In some cases, most legumes have been lost in pastures. So many pastures probably need some improvement, and legumes should be one of the first considerations.

Success of frost seeding of legumes can be increased if the pasture has some bare soil showing. The seed needs to land on bare soil so that the freezing and thawing of the soil incorporates the seed. So, the more "abused" the pasture is, the better the establishment. Also, since the grass stand is mature and has a good root system, it can really outcompete the just seeded legume. Try and give the legume as much help as possible. You might consider heavily grazing fescue pastures now to eliminate top growth and leave some bare soil.

Don't fertilize with nitrogen, as you'll only encourage the grass. Remove the cattle off the pasture if the grass stand is really short when the legume emerges and remember that continuous grazing will prevent the clover from maintaining, so be sure to allow 30 days between grazing.

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Extension

January, 2017

Cattle Call



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Winter Weed Control

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Tired of looking out across your pastures / hay fields and seeing that "sea of yellow" every spring? One of the signs that spring has arrived is when the yellow flowers of buttercup begin to appear, but it's during the winter

months that the vegetative growth of buttercup takes place. As a cool season weed, this plant often flourishes in over grazed pasture fields with poor stands of desirable forages. In fact, many fields that have dense buttercup populations are fields heavily grazed by animals during the fall through the early spring months. Buttercups are sometimes classified as short-lived perennials, but often grow as winter annuals. Buttercup is toxic to all species of livestock. The toxin protanemonin is released when the plant is chewed or otherwise wounded and is present in all parts of the plant. Animals that eat buttercup may suffer from blistering of the mouth and internal parts of the gastrointestinal tract, diarrhea, colic, and, in severe cases, death. Fortunately, most animals will not eat buttercup because it is unpalatable. The toxin become inactivated when dried so buttercup is not a concern in hay.

Most buttercup plants emerge from seed during the fall or late winter months. Therefore, pasture management practices that improve and promote growth of desirable plants during these months is one of the best methods to help compete against the emergence and growth of this plant. Mowing fields or clipping plants close to the ground in the early spring before buttercup plants can produce flowers may help reduce the amount of new seed produced, but mowing alone will not totally eliminate seed production.

For chemical control, herbicides registered for use on grass pastures that contain 2,4-D will effectively control buttercup. Depending on other weeds present products that contain dicamba+2,4-D (eg. Weedmaster), aminopyralid (eg. ForeFront, Milestone), triclopyr (eg. PastureGard, Crossbow), or metsulfuron (eg. Cimarron) can also be used. However, legumes such as clovers interseeded with grass pastures can be severely injured or killed by these herbicide products. For optimum results apply a herbicide in the early spring (January - March) before flowers are observed, when buttercup plants are still small and actively growing. For best herbicide activity wait until daytime air temperatures is greater than 50 F for two to three consecutive days. When determining which product is best for your operation, be sure to read product labels to find out the details about grazing and haying restrictions as they vary widely between these products

An effective weed control program is essential to establishing and maintaining highly productive pastures and animal performance. We need to remember that "An ounce of prevention is worth a pound of cure." Select well-adapted grass and/or legume species that will grow and establish rapidly. This will minimize the length of time for weeds to invade easily. Lime and fertilize according to soil test recommendations. Proper pH and nutrient status will help insure that the forage will grow rapidly and be more competitive with weeds. Manage grazing properly. Overgrazing is a common cause of weed problems. Heavy grazing pressure may favor weed growth over grass. Identify weed problems and location and select which option or combination of options you

plan to use for weed control (mechanical, chemical, or grazing management), but the most important factor is to put it in practice and evaluate the outcome.

