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Optimum Pasture

A few years ago, I completed a survey concerning production challenges and underutilized opportunities in beef cattle production pertaining to how research and educational programming provided by the Cooperative Extension Service can address it. I determined the most underutilized opportunity we have in beef production is land. As survey discussion occurred among respondents, there was criticism of my answer as most indicated the lack of available land and competition from grain producers across the state. However, my answer was not referring to the availability of additional grazing land, but rather the underutilization of land grazed.

As I have previously indicated in this news column, the goal of every commercial beef farm in the business for equity growth should be to obtain the maximum pounds of beef sold annually per grazed acre. This is true whether it is cow/calf production or purchase to grow and resell stocker calves. Certainly, the best forage feeding systems are only maximized through proper herd management including defined calving seasons, replacing non-performing cows and bulls with superior genetics, implementing herd health management, and weaning rates above 85%. In other words, in a 24-month period, no less than 17 calves will be weaned in a 10-cow

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herd. Writing this makes beef cattle production sound easy; it is not. Environmental factors create challenges all year. Mud and disease pathogens cause calf losses during winter. Summer drought, heat stress, face flies, and endophyte-infected fescue reduce gains and conception in the summer. Yet forage management is the one component of beef production optimized with improved management to increase winter survival, overcome summer stress, and ultimately increase stocking rates.

The first step to increased stocking rates and subsequent animal sales volume is the concept of grazing the grass and baling cropland. This is a very different approach than the typical "cut for hay once and graze later" model. It requires an investment of a hay baler designed to roll wet hay and a bale wrapper to create bale silage (baleage) of winter annuals. Growing winter wheat or cereal rye during the winter on owned or rented row crop land is becoming quite common across the area. The forage is harvested by mid-May and wrapped to create a high-yielding, high-feed value winter feed. The land is then planted with corn or soybeans. When someone asks about constructing a hay storage barn, I always respond by asking, "Have you considered investing your barn money in a hay wrapper?"

Another issue seen in underutilized pastures is the inability to stock more cattle due to poor forage quality. The first step in increasing stocking rates is managing grassland for maximum production. Fertility and weed control are both necessary. All too often I see soil test results from pasture and hay land in the low range for p and k, and often low in pH. For land to ever have a chance at maximum yield potential, it is key to provide adequate fertility followed by a two-pass herbicide program in early spring and late summer. I often hear of the risk of clover stand loss with herbicide use. Clover can be planted later. If weeds are outcompeting grass, you are never going to obtain control of the potential of your land. Likewise, every grass farm

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should own a rope wick applicator that allows the treatment of warm-season grasses like foxtail and johnsongrass. I even suggest tile drainage if it is needed. Just like corn, tobacco, and oak trees, cool-season grass grows best on well-drained soils. Tiling the entire field may not be needed but burying some strings through areas that remain wet will contribute to increased carrying capacity.

Now through September 20 is the optimum time to seed fescue and orchard grass at the rate of 15 to 25 pounds per acre. UK recommends sowing novel endophyte fescue if the existing fescue is killed. If interseeding, the toxic endophyte fescue dilutes the novel endophyte eliminating a positive return on investment. The last two years have been extremely dry resulting in poor stands. Adequate soil moisture is available this year so it is safe to plant with the expectation of additional moisture in September. Spraying twice with glyphosate and a broadleaf herbicide before planting could be needed to effectively eradicate the existing forages for a complete reseed. Interseeding into an existing stand is an option but a pre-plant treatment with a broadleaf herbicide is recommended to reduce competition.

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