

PASTURE MANAGEMENT

Monitoring Pasture Systems Boosts Profits

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As farm financial records will indicate, feed cost is the largest expense incurred in any livestock operation. Increased awareness to nutrient requirements and commodity markets can help reduce this expense. Another area that offers a reduced feed cost opportunity lies within grazing management. In fact, with a heightened awareness of this practice, grazing management has been known to effectively reduce feed costs by as much as 50 percent depending on the goals of the farm.

Unfortunately, simply improving or adding a grazing component to lower feed cost in the operation in itself may not be enough to highly impact the profitability of the farm. The main reason is because it's just not that simple. However, it is certainly attainable while realizing there is a significant level of forage management that goes along with successful systems. Adopting this strategy can also come at a cost. Therefore, it is essential to balance the benefits of this decision to its affect on the entire farm operation. Achieving and maintaining animal productivity when using pasture for the primary forage source requires constant management. While a single daily decision may not be highly critical, the accumulation of daily decisions are and will affect pasture quality, quantity, production and ultimately the bottom line.

There are several factors that should be considered with grazing management such as body condition scoring, paddock planning,

forage sampling and analysis, and pasture topdressing. Decisions should be made in the context of a holistic forage feeding plan that provides alternative options in case the pasture is in short supply or in overabundance. Much of the planning can and should be done before the grazing season begins and continuously adjusted throughout the season to ensure adequate and quality forage for the entire season. Forage analysis will vary upon the height and maturity of plants grazed and several other factors including climate, soil type, plant variety, soil fertility, plant health, and insect infestation to name a few.

In planning, be sure to review any notes taken during the last year. How did the pastures and hay ground perform? What were the environmental conditions? Was there a drought or was it real wet, etc.? Were you able to determine carrying capacities of each paddock? Have the number of animals on pasture increased? If so, perhaps there is a need to re-assess the stock density for the paddocks. This can be done by matching the number of animals allotted to a specific paddock to the amount of available forage, grazing utilization rates, daily intakes, and length of grazing period. This evaluation is an essential factor for any grazing system to be successful. It is particularly true in a system that reaches for higher performance in their cattle, whether it is the growing steer/heifer or the lactating/nursing cow.

There are several tools to assist in the determination of pasture quality and/or volume once the forages begin to grow in the spring. Some of these include pasture rulers, plate meters, and electronic gauges. When utilizing any of these tools, remember, as with soil sampling, accuracy is correlated with a consistency of the sampling technique. Just as crop producers can not accurately diagnose the condition of the corn field from the road neither can cattle producers diagnose the forage quality and availability from the ATV. It is important to take the time to get into the field and monitor the condition of the forages. With a grazing system, this is time off-set by not having to harvest these forages mechanically. In time experienced graziers develop their visual assessments and can quickly estimate the forage production and health of each paddock.

Proper pasture and forage assessment is critical to the livestock operation. There are several benefits of assessment. However, the main reasons for assessing pasture are: 1) to match animals' requirements with pasture production; 2) to achieve more precise supplementary feeding; 3) for accurate feed planning; 4) to more effectively manipulate pasture production and composition; and 5) to ensure ground cover is sufficient to protect soil from rainwater run-off and to encourage water infiltration into soil.

Pasture assessments also help producers to identify specific areas to target management improvements that can be profitable and effective. For example, on low yielding pastures, could applying fertilizer improve production, or would introducing more productive forage species be a better solution?

Production is primarily determined by the consistency of daily intake. This is no different if feeding a silage base diet or a pasture based diet. The three critical variables of daily intake are; 1) amount or quantity available 2) quality or digestibility and 3) composition or palatability. For pasture based diets forage availability is determined by height, density of sward, and moisture content. Therefore, close monitoring of pasture and performance is essential to boost returns. Research from land grant universities have shown that producers can save several dollars an acre by more accurately measuring and budgeting pasture forage.

In essence, pasture assessments provide producers with information needed to make informed decisions on grazing management. Assessments size up the condition of the pasture and identify strengths and weaknesses so management can be targeted to produce specific results. These repeated pasture assessments help to optimize forage production and evaluate the sustainability of pasture management systems.