Our team of Angus advisors offer regional tips for herd management.


## Southern Great Plains

## by David Lalman

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We spend a lot of money, time and effort producing harvested forage in the southern Great Plains. With hay season in full swing, you should know a few techniques can reduce spoilage loss and preserve quality in hay stored outdoors. Dry matter and nutritive value loss in hay stored outdoors in the southern Great Plains is about 10-30\%.

Kevin Shinners, University of Wisconsin-Madison provided practical tips to minimize these losses during one of the Ranchers' Thursday Lunchtime Series webinars. Following is a summary of his round bale hay storage tips:

- Wrap tight/dense round bales with net wrap to create a thatch that will shed water.
- Butt round bales tightly together end-to-end in rows. If hay will not be under a roof or covered with a tarp, do not stack vertically. During years with normal precipitation in the southern Great Plains, stacking results in a dramatic increase in moisture retention and spoilage.
- Stack bales on a well-drained south-facing slope if possible. Stack the bales to encourage water runoff to exit the hay storage area as quickly as
possible. The south-facing slope will ensure maximum exposure to the sun to enhance drying.
- Stack rows north to south, with plenty of space between rows. Rows that are close enough to touch increase moisture wicking. Rows too close together restrict air movement (drying), restrict sunshine (drying) on the east side of the bales in the morning and restrict sunshine on the west side of the bales in the afternoon. If possible, provide enough space so the sun can reach the bottom $1 / 3$ of the bales on both sides.
- A good rule of thumb, assuming space is available, is to leave a mininim of 5 feet or more of open space. The size of your mower may help you determine the most practical spacing. Controlling vegetation between rows during storage increases airflow and exposure to sunlight to facilitate drying.
- Never stack hay near trees, buildings, brush or tall crops where sunlight may be blocked all or part of the day and airflow is reduced.
- Moisture wicking and bottom spoilage can be reduced by stacking bales on a rock bed or raising the bales off the ground.
A few modifications to your hay storage could pay big dividends.

More details are available in Shinners webinar presentation, available at www.beef.okstate.edu.

Western Region<br>by Zach McFarlane<br>California Polytechnic State University smcfarla@calpoly.edu

How do you replace a legend? The correct answer is that you don't; you strive to use that legacy as inspiration. Randy Perry's legacy on the beef industry and particularly in California cannot be replaced. His contribution to students is what I strive to achieve in my career. If I can have a fraction of the impact Perry had on students that are now industry leaders, I will consider my career a success.

As I continue writing this column in the future, I want to focus on the diversity of the Western region. Beef cattle management is a dynamic decision-making process that changes with the seasons and the production cycle. My philosophy is that I can learn something every day, even if that is just gaining new perspectives.

The fact is those of us in academia can learn a lot from producers. Management practices in the Western region are as diverse as the states that comprise it. After helping some local ranchers preg-check this past weekend, a comment was made
that I think holds true for most producers.

The rancher stated, "When it rains, it makes being in the cattle business a little easier. Look at all this feed out here. I wish I could afford to buy some more cows, and it is a shame that the grass is already starting to turn."

This made me think about two things: the cattle market and supplementation as forage conditions shift.

As we transition to spring and early summer, many of you may be focused on selling your calf crop, so pay attention to vaccination protocol and develop a marketing strategy. Unprecedented cattle prices are a welcome sight after years of drought, declining cow inventory and rising production costs. Now is the time to take advantage of feeder calf prices.

Contact sales early, whether at a local sale barn or a video sale. Even with hopefully sustained high cattle prices on the horizon, there is money that can be left on the table if you don't take advantage of the many different marketing programs. The audits and expense for cattle marketing are a small price to pay to take advantage of the potential longterm relationships you can develop with cattle buyers.

Whether you operate with a fall- or spring-calving herd, you are likely preparing for the transition in feed resources leading into the summer months. Grass will either be greening up and taking off, or those of us on the West coast will see grass browning up. As a nutritionist, I think about the type of supplements to provide under different grazing conditions. Free-choice mineral is always an important supplement, regardless of forage conditions. The choice between whether to use a protein and/or an energy supplement
is dependent on the standing forage. While the choice can be as easy as visual assessment, a general rule of thumb is to get your forage tested.

During forage dormancy, protein is deficient and typically does not meet the minimum $7 \%$ crude protein requirement for optimum rumen fermentation. Therefore, a protein supplement is typically necessary while grass is browning up. Examples of common protein sources are alfalfa hay, distillers' grains, corn gluten feed and soybean meal. Range cubes, molasses lick tubs and protein blocks can also be viable options.

During green up and when forage has a high water content, an energy supplement can be provided. If you are trying to conserve forage, energy supplementation provides a substitution effect where cattle will consume and digest more supplement than grass.

Producers that are still fighting drought conditions and wanting to conserve forage should consider feed a source of energy. Common energy supplements include grains with a high starch content such as corn, barley, and oats and other byproduct feeds like almond hulls, soyhulls and wheat middlings. Always focus on the cheapest and most accessible supplement source.
Even with cattle prices providing some much-needed optimism, focusing on the details will save money in the long-term.

## Southeast Region

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TV informercials can be convincing. That new gadget promises to save you time and money for only $\$ 19.99$, plus shipping and
handling. It's exactly what you need; but doesn't really fulfill all its lofty promises. In the Southeast, one of our main forages looks promising but doesn't deliver as expected.
Fescue can serve as a main forage supply. Still, there are some things that need to be considered to mitigate the toxic endophytes. As a blessing, a pasture full of growing grass looks just like the cure for supplying nutrition through the spring and early fall. As a curse, cattle with an abundant amount of grass are a body condition score thinner than ideal, conception rates are poor, and late-spring hair coats look like shag carpet sopped in mud.

Most folks understand tall fescue is bad stuff, but they either don't know the total effects, or feel helpless to do anything about it. If you ever wondered why producers have fall-calving herds, this is one of the reasons. Breeding seasons in May and June can have very disappointing conception rates when toxic endophyte fescue is the main forage. Although fall calving helps, the growing calves and replacement heifers will be victims come spring, enduring long-term effects.

Research in Georgia and Arkansas showed calves grazing infected endophyte fescues had reduced gains of 50 pounds (lb.) compared to calves grazing novel (nontoxic) endophyte fescue. The Arkansas study also evaluated tall fescue's effects on reproductive performance. Cattle grazing novel endophyte fescue had significantly better pregnancy rates for mature cows, $85.1 \%$ vs. $44.7 \%$. Calving rates for heifers on novel endophytes were $90.6 \%$ vs. $64.1 \%$. Stocker cattle grazing toxic endophytes have average daily gains reduced by 0.5 lb . in the fall and 1 lb . in the spring.

Research shows having clover in tall fescue pasture dilutes some of the effects and helps improve gains in growing calves. Removing toxic fescue and planting a novel variety or some other grass is costly and has some risk, but it can certainly be a worthwhile project if conception rates are improved by $10 \%$ over the long term. When pasture renovation is not an option, it may be worthwhile to investigate chemical seedhead suppression or introduce genetic lines that have tolerance to endophyte-infected fescue.

In 2022 I visited the Angus herd at Biltmore Estate in Asheville, N.C. They had been focusing their genetic selection and mating decisions on fescue tolerance and adaptability, and had used hair-shedding scores in their heifer selection process. Purebred Angus cattle were grazing June fescue at 2 p.m. in 92-degree heat. Now that the hair shedding expected progeny difference (EPD) is available, producers have another tool in the toolbox to help mitigate fescue toxicosis.

## Midwest Region

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## Know the cost of your forage

 options.Make cows be at your service by reducing reliance on purchased and raised feeds. Hay is relied upon during winter, but it's more expensive than grazing. The University of Missouri estimates producing 6,000 lb . of forage per acre costs $\$ 297.52$. That translates to $\$ 49.58$ per 1,000lb. bale of hay, not accounting for storage and feeding waste. Let's assume using basic ring feeders
causes $20 \%$ waste. The cost rises to $\$ 61.98$ per $1,000 \mathrm{lb}$. of hay consumed.

Renting pasture for grazing at \$75 per acre per year produces $6,000 \mathrm{lb}$. of forage, with only $30 \%$ harvested. At $\$ 41.67$ per $1,000 \mathrm{lb}$. of forage consumed, grazing is more cost-effective. Farmers can cut costs further by feeding hay for fewer days in the upcoming winter season. Use local rent rates and forage production for a more accurate estimate of grazing costs.

This math can be used to value a managed grazing system. Above, we assumed $30 \%$ grazed forage utilization. This is a non-managed grazing system where cows stay on the same pasture. Forage utilization rate can be doubled by implementing a simple managed grazing system. If this occurs, the cost per $1,000 \mathrm{lb}$. of forage grazed is reduced from $\$ 41.67$ to $\$ 20.84$. If cows graze for eight months per year, our grazing system saves $\$ 166.72$ per cow per year. We can afford a lot of fence and water infrastructure if forage costs are reduced by $\$ 166$ per head each year.

## Change your grazing platform

 to account for lean forage growth months.Beef cows require year-round feeding, but not all classes of cattle must be on the farm 365 days. Farmers who stock their grazing platform with only cow-calf production expose their operations to drought risk. Farmers should aim to have animals that retain their value during droughts. The following are three "flexible grazing unit" ideas:

1. Delay weaning fall calves until cows begin to lose body condition in the summer, as this aligns with the growth curve of tall fescue. Calves are heavier at weaning because weaning weight is affected by calf age.
2. Obtain stocker calves to graze tall fescue pastures during the spring. Stock heavily for 90-100 days before selling, increasing cash flow. Having fewer mouths to feed in the fall increases the number of acres that can be stockpiled for winter grazing. If biosecurity from auction market cattle is a concern, background a neighbor's calves. There are multiple custom grazing arrangements that can be mutually beneficial to both sides. A grazing platform that is $75 \%$ or less cow-calf and at least $25 \%$ stockers is ideal.
3. Consider keeping a larger proportion of heifers at weaning and let Mother Nature decide which get to become replacements. If it's dry at weaning and winter feed looks bleak, only keep the ones you need. If forage resources are abundant, keep all heifer calves. Use a prebreeding exam or genetic selection tools to pick the ones unfit to breed. Then, expose all heifers to one round of timed artificial insemination (TAI). Extra bred heifers can be marketed at a premium, and the open heifers can be marketed as feeders.
Be creative with your grazing platform and diversify your allocation of forage resources. Your cows should work for you, not the other way around. Remember, the more iron and oil you put between the sun and a cow's mouth, the less profitable you will be. Jim Gerrish said that awhile back, and today, it is more valid than ever. $\operatorname{A}$
