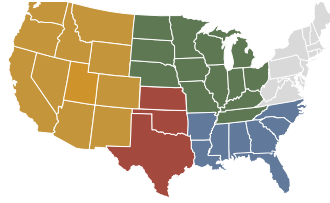


ANGUS ADVISOR

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



Southern Great Plains

by David Lalman

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Dry conditions persist throughout most of the Southern Great Plains. Standing forage and harvested hay are in short supply throughout the region. Many operations have downsized their cow herds and weaned calves earlier than normal. Hopefully we will receive adequate moisture to facilitate cool-season forage production and grazing this fall. During late August, grass hay was listed at \$125 to \$175 per ton. Perhaps this is a good opportunity to discuss options to improve hay feeding efficiency.

In the January “Angus Advisor” column, the advantages of rolling round bales out and the costly inefficiency of some round bale hay

feeders (up to 21% of the original bale wasted) were discussed. In the July “Angus Advisor”, limit-feeding a concentrate diet was discussed.

This strategy requires more intense management, facilities and labor, but it can dramatically reduce hay use because limited amounts of concentrate feed supply most of the nutrients. We have used this strategy with great success in recent years.

A different strategy that might work for some small and mid-sized operations is to restrict access to hay using a sacrifice pasture or pen and hay feeders. Basically, the strategy is to place an adequate number of hay feeders in a large pen or grass trap. Open the gate to allow access to the hay the same time each day. After six to 10 hours of access, push the cows out of the pen (or pasture) and shut the gate. In one University of

Minnesota experiment, restricting access to high-quality hay for six hours reduced hay consumption by nearly 23%. Restricted cows gained 27 pounds (lb.), while unrestricted cows gained 51 lb. during the trial period.

In a recent experiment at Oklahoma State University (OSU), restricted access (seven hours per day) was combined with an efficient hay feeder. In this study, hay waste was reduced from 25% of original bale weight in the unrestricted, sheeted-bottom feeder treatment to 12% of original bale weight in restricted, efficient hay feeder treatment (Figure 1).

Time of restriction should be based on hay quality and current condition of the cattle. This strategy is not recommended for 2-year-old females or older cows with marginal

Figure 1: These images were recorded on the same day, 24 hours after fresh bales were placed in the feeders. Cows were allowed unlimited access to the hay (left) or restricted to seven hours of access (right).



teeth, thin condition, etc., unless hay quality is exceptional. Adequate feeder space must be provided to ensure the more timid cows have adequate access to hay.

Western Region

by Randy C. Perry
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Fall-calving herds

Main focus: finish the calving season and prepare for the breeding season

- 1. Sire selection.** Continue developing a list of potential AI (artificial insemination) sires. Focus on bulls that will produce high-quality herd replacements. Talk to other producers about bulls that have worked well for them. I also like to read bull sale reports and see if any sires are consistently producing the high-selling bulls in numerous programs.
- 2. Prebreeding vaccinations.** Be sure to get cows and heifers vaccinated with prebreeding vaccinations at least 30 days prior to the start of the breeding season. At a minimum, females should be receiving at least 2 vaccinations: 1) the respiratory complex plus leptospirosis and possibly vibriosis and 2) either a 7- or 8-way clostridial vaccination.
- 3. Deworming.** Consider deworming females at the same time they are vaccinated with either an injectable, paste or pour-on product. We prefer to deworm twice per year and use an orally active product in the fall and a pour-on product in

the spring or early summer.

- 4. Mineral injection.** Consider injecting females with Multimin® at the same time that vaccinations are given. Boluses such as selenium or copper boluses could be used in place of Multimin.
- 5. Retained placenta.** Continue to monitor females for retained placenta. If problems arise, treat them promptly with a prostaglandin injection (5 or 6 cc). If that treatment does not result in the females cleaning promptly, reinject with another prostaglandin injection and combine that injection with an antibiotic either infused into the uterus or given either intramuscularly (IM) or subcutaneously.
- 6. Mineral supplementation.** Be sure females are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. Mineral supplementation becomes even more important as we approach the breeding season.
- 7. Body Condition Score.** Continue to monitor body condition score (BCS) of calving females. The target level of BCS is 5.0 (scale = 1 to 9) for both cows and heifers. Ideally, this level of body condition should be maintained during the breeding season. However, this becomes more difficult as forage resources start to get depleted at this time of year and at the same time, cows' nutrient requirements increase due to an increasing lactation curve.
- 8. Overconditioned.** Avoid getting cows overconditioned

during the breeding season, as reproductive performance starts to decline if cows are above a BCS of 6.5 to 7.0. This is not typically a problem in most operations. With the drought conditions in the West this year, I don't think we are going to see very many overconditioned beef cows. This is most typically a problem with donor females that have not raised a calf for a period of time.

- 9. Protein and energy supplementation.** Be certain both protein and energy requirements of females are being met. If possible, try to have females in a state of positive energy balance (gaining weight) going into the breeding season. However, this is not easy to achieve because of conditions described in Point #7.

With drought conditions, supplementation is even more important. The best way to monitor the level of protein supplementation is to monitor fecal output. If the females are receiving adequate levels of protein, their stools will flatten out on the ground. If the stools appear to be highly fibrous and don't flatten out on the ground, most likely the females are protein deficient.

The best way to monitor energy supplementation is to simply keep a very close eye on the level of body condition. Both energy and protein requirements must be met if females are going to cycle and breed on time.

- 10. Nursing calf health.** Treat calves for either scours or

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pneumonia promptly. It is well-advised to have first and second treatment options available for both conditions.

Spring-calving herds

Main focus: getting calves weaned and keeping them healthy

- 1. Minimize weaning stress.** Try to minimize stress on weaned calves as much as possible. Pasture weaning is a big advantage. Try to avoid dry, dusty lots for weaned calves. Shade is extremely valuable, and either sprinklers or a water wagon to control dust is well worth the trouble and expense, in my opinion.
- 2. Temperature changes.** Hopefully, Mother Nature cooperates in terms of weather changes as weaned calves are getting adjusted and transitioned to a new environment. Our experience indicates the difference in temperature between the daytime high and the nighttime low is extremely important. If that number exceeds 40 degrees, we experience more problems with respiratory disease.
- 3. Started on feed.** Get calves started on feed as smoothly as possible. Try to avoid any big changes either in terms of the amount of consumption or the type of ration being fed. Transition calves slowly from a total forage diet to a combination of roughages and concentrates.
- 4. Rate of development.** Be sure both weaned bull and heifer calves are being developed at adequate rates of gain so differences in terms of genetic potential for growth can be

exhibited. However, neither sex should be developed at extremely high rates, as excessive fat deposition can hinder future reproductive performance and detrimentally affect foot and leg soundness.

Our target level of performance in developing bulls is an ADG (average daily gain) of 3.0 to 3.5 lb. per head per day. A general rule of thumb concerning the level of concentrates for bulls to achieve that level of performance is 1% of body weight.

For example, 600-lb. bull calves need 6 lb. of grain or concentrates per head per day; 900-lb. bulls need 9 lb., etc.

Our target level of performance in developing heifers is an ADG of 1.5 to 1.75 lb. per head per day. I prefer to develop females on pasture without them ever receiving any grain or concentrates. They must have access to good pasture resources to achieve this level of performance.

For many producers, they don't have good pasture available during the fall and winter. Thus, they must feed their females in a lot during this time of the year.

- 5. Parasite control.** After weaning, control internal and external parasites. Heifer calves should be Bang's vaccinated.
- 6. Business or operational plan.** Fall and early winter is a good time of the year to put some thought into developing or refining business and marketing plans for your operation. Get input from employees and involve them in the process. Many times we set operational

goals without input from the people who are going to be involved in helping us to achieve those goals. It is typically much easier to get "buy in" from employees if they feel they had input in developing the mission and goals of an operation.

Southeast Region

by Jason Duggin

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Our business plan and our execution of it will dictate profit over time. If we keep profit front and center, it will guide all our decisions, even now.

A cow herd is a bank account. An operation's hard-earned money is tied up in the cows as well as the land and equipment. It's an investment. With some strategy and focus, that investment account can yield a return most years. How can an operation weather challenging economic times?

The answer is found in focus. Where we spend our time and money is what we are focused on. If we spend our time buying feed due to overgrazed pastures and constantly needing to replace middle-aged cows that don't rebreed in an acceptable time frame, we need to refocus.

Every square inch of grazeable land is a feed resource for the production system. If we as producers can develop and maintain the best environment for growing grass, the cow herd will be more productive, incur fewer health challenges and should reap more profit. If we manage cow size and herd fertility with land, we have a viable business plan going forward. Then we can hammer down on carcass merit in terminal calves and focus more on value-added and niche marketing. Here are three keys for profit.

1. Focus on grazing: We are cattle producers, but the land is the ultimate source of revenue. Without the appropriate soil health to grow grass, there are very few, if any, opportunities for a cow-calf operation to exist in the Southeast. Even stocker operations often conclude grass is still an essential part of gut health that affects morbidity and mortality, even though silage and commodities feeds look to be the most important.

2. Grazing management and soil health: Applying lime and fertilizer according to recommendations is often the best investment for our land. However, rotational grazing will help make that invest last longer and improve the soil's health and organic matter over time. This improves water retention and herd disposition, extends the grazing season, and reduces stored forage inputs and weed pressure.

3. Focus on cow size: The biggest heifers in the replacement pen may weigh 1,600 to 1,800 pounds (lb.) as 6-year-olds, and are most likely not your most profitable cows. Weigh both cows and calves at weaning for each pair. Calculate the percentage of body weight weaned for each cow. It is eye-opening. The 1,600-lb. cows will need 3 lb. more dry matter per day, but do they wean a heavier calf? The 1,800-lb. cow will need 6 additional lb. of dry matter per day.

4. Focus on fertility: Wean a heavier, more consistent calf crop while improving reproductive traits in the herd. Get half your calf crop "planted"

in one day by using fixed timed AI or even using estrous synchronization in natural-service situations.

When we focus on pasture management, cow costs and fertility, the tough times are easier to bear and profit will be more attainable regardless of the year.

Midwest Region

by Eric Bailey

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Input prices and drought conditions across a large swath of the country have put pressure on profitability in 2022, despite strong cattle prices. This fall, many of y'all might be faced with the decision to background or precondition weaned calves before marketing. When I work with producers on issues like this, the number I use to evaluate preconditioning and backgrounding enterprises is "feed cost of gain."

Feed cost of gain requires you to know the cost of feed, rate of gain and the amount of feed fed. Here is an example. My feed costs \$0.15 per lb., or \$300 per ton. Calves are gaining 2.5 lb. per day and eating 15 lb. of feed (6 lb. of feed consumed per lb. of gain). Feed cost of gain is \$0.90 per lb. of gain (\$0.15 per lb. * 6 lb. feed to gain). The feed-to-gain ratio (lb. of feed per lb. of weight gained) is a very important metric of the efficiency of this enterprise.

So, how do you best keep feed-to-gain ratios low in growing calves? I formulate energy-dense rations. I formulate total mixed rations that have greater than 0.50 megacalories of NEg (net energy for gain) per lb. of dry matter.

Where this stirs up debate is forage inclusion in a ration fed to backgrounded calves. Many farms

produce vast quantities of forage cheaply. However, when you price the cost per unit of energy, forages are usually more expensive than concentrates. Grass hay is often between 0.20 and 0.30 megacalories of NEg per lb. of feed. Having a nutritionist evaluate your unique scenario is very important.

I am rarely above 30% forage in any ration, because I encourage farmers to weigh feed delivered to calves and to use a bunk calling system. Increasing the energy density of diets fed to these calves will improve feed efficiency.

I am not discounting all forages. Certainly, there are fall and winter forage crops that are in the vegetative growth stage that will support significant calf weight gain. If you have access to these, I encourage their use, as they will often be a cheaper feed source for backgrounding calves. I see a lot of folks in Missouri build backgrounding diets around free-choice grass hay and 2-3 lb. of grain. That type of diet will not support the feed cost of gain needed to be profitable in this market.

The best way to know how your operation stacks up is to compare to other operations. Successful backgrounding operations will have the cost of gain values that are less than feedlot cost of gains. I like to encourage folks to shoot for their cost of gain values to be $\frac{2}{3}$ that of the feedlot. Kansas State University's Focus on Feedlot monthly report is an excellent resource for identifying feedlot cost-of-gain values. It can be found at www.asi.k-state.edu/about/newsletters/focus-on-feedlots/. 