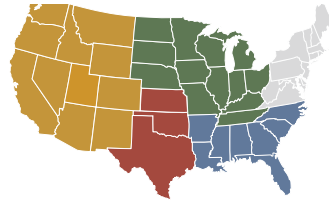


ANGUS ADVISOR

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



Southern Great Plains

by David Lalman

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Dry conditions have persisted throughout most of the Southern Great Plains and other Western states since fall 2021. At the time of this writing (May), summer pasture and hay production was anticipated to be well below average throughout the region. By now, most operations within drought-intense regions will have liquidated some cows, or leased pasture and moved cows to another part of the country.

Feeding through a drought is rarely an economical strategy. This year, harvested forage will be scarce and about as expensive on an energy basis as concentrate feed commodities. Nevertheless, some seedstock operations may be forced to “feed” at least a nucleus of their genetics until conditions improve. The following thoughts and suggestions are intended for those situations.

First, if you do not have experience formulating and/or evaluating diets for beef cattle, be sure to seek guidance and assistance from a professional who does. Most feed industry and extension nutritionists have dealt with similar scenarios and will be happy to assist in developing your program.

Next, if you intend to purchase harvested forage, be sure to require a forage test to determine its nutritive value. Preferably, the seller would provide test results from a certified laboratory. If not, the buyer should request to have the forage tested before purchase.

The National Forage Testing Association provides sampling recommendations and a list of certified laboratories at www.foragetesting.org. Click on “Certification” then “Proficiency Certification Program” to access the list of certified laboratories. Be sure to have any nitrate-prone forages tested, and be on the lookout for other potential anti-quality factors, such as excessive moisture or mold.

Numerous ration evaluation programs are available to help you develop a well-balanced nutrition program at minimum cost. Examples of university-sponsored programs include:

- University of Arkansas: Cattle Grower Ration Balancer
- Iowa State University: BRaNDS
- University of Georgia: Basic Balancer
- Oklahoma State University: Cowculator

See the October 2021 *Angus Journal* “Angus Advisor” column for additional forage sampling

suggestions and a diet/hay price evaluation example.

Depending on availability of concentrate feed commodities and cost, limiting feeding a concentrate-based diet could be an alternative to keep cows in good condition, stretch scarce roughage supplies and avoid overgrazing drought-stressed pasture and rangeland. This program is not for everyone as it requires more intense management, nutritional knowledge, feed storage and mixing and feeding equipment.

A simple example of a concentrate-based diet for a moderate-sized gestating cow may include 0.5% of body weight roughage, 0.75-1% of body weight rolled corn, and 2-3 pounds (lb.) of a protein supplement. For a 1,300-lb. Angus cow, I used 9 lb. of rolled corn priced at \$300 per ton, 6 lb. of mature prairie hay priced at \$120 per ton, and 3 lb. of a cottonseed meal-based supplement priced at \$500 per ton.

Daily feed cost was \$2.43, and projected weight gain was about 1 lb. per day. Consider that the supplement must be formulated specifically for this type of diet to include salt, extra calcium, vitamins and trace minerals.

Additional diet, feeding management recommendations and ration examples can be found

in Extension Fact Sheet ANSI-3028, “Limit Feeding Concentrate Diets to Beef Cows.”

Western Region

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Fall-calving herds

Main focus: cows are on cruise control.

1. If any precalving vaccinations such as a scours vaccine are going to be used, now is the time to decide on the specific products and get products on hand.
2. Be sure cows are receiving adequate levels of calcium, phosphorus and trace minerals deficient in your area. Multimin® is an excellent injectable product, if that is a preferred route of administration. Copper and selenium boluses are available and a highly effective means of delivering trace minerals over an extended period of time.
3. The target level of body condition at calving is a minimum body condition score (BCS) of 5.0 for mature cows and 6.0 for 2-year-old heifers on a scale of 1 to 9.
4. Midsummer is typically a time of the year when fall-calving cows will maintain themselves adequately with no need for energy or protein supplementation, as long as forage is available.
5. The developmental period from weaning until breeding time is critical in terms

of influencing the future productivity of females. Females should be developed to reach approximately 55% of their projected mature weight at the start of the breeding period.

Spring-calving herds

Main focus: breeding season and suckling calf health.

1. Depending on desired calving dates, the artificial insemination (AI) breeding period should be concluded. Monitor return heats and cleanup bull performance for any problems that may arise.
2. Be sure cows are receiving adequate levels of calcium, phosphorus and trace minerals deficient in your area. Consider chelated mineral products especially prior to calving and through the end of the breeding season. See the comments above on injectable and bolus mineral products.
3. Energy balance has a major effect on fertility. Thus, it is critical cows are in a state of positive energy balance or gaining weight during the breeding season. If cows are grazing irrigated pastures, they are usually fine in terms of being in a state of positive energy balance.
4. Treatment protocols and products should be on hand for scours and pneumonia in suckling calves. It is best to have two treatment options for both conditions, and be sure treatment protocols have been communicated to the appropriate personnel.

General management

1. If irrigated pastures are part of your forage resources, timely irrigation during hot summer months is critical in terms of affecting forage production. Midsummer is also an excellent time to control thistle or other invasive weeds in pastures.
2. Midsummer is the time of year when problems with pinkeye can become prevalent, and thus treatments can become very time-consuming. The incidence of pinkeye can be reduced by clipping tall, mature grasses and controlling flies with dust bags, pour-ons, fly tags and/or mineral products that have fly-deterrent products included. In addition, availability of shade helps to reduce the incidence of pinkeye. It is important to treat problems quickly and aggressively, reducing the spread of the disease by flies.
3. Antibiotics, such as long-acting oxytetracyclines are very effective in treating pinkeye. We have also had success with squirting 2 to 3 cc of Nuflor® directly into the infected eye. A more inexpensive treatment option, but one that is more difficult to administer, is to treat the infected eye with an injection of 2 to 3 cc under the membrane that covers the upper portion of the eyeball with a mixture of 90% penicillin and 10% dexamethasone. We make up the mixture by buying a 100-ml bottle of penicillin at the beginning of each summer, pulling out 10 ml of product and replacing it with 10 ml of dexamethasone.

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4. Most people prefer to apply patches to infected eyes, which can be made very easily from old worn-out jeans. Leave the bottom portion of the patch unglued so the eye can drain.

Southeast Region

by Jason Duggin

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What is the one decision that makes a great cow-calf operation able to persevere through the tough times, and flourish in the good? In my opinion, it's grazing management. If we are to be good ranch managers, soil and forage management is the defining decision that can make our operations successful for generations.

Success in a beef cattle operation can mean many things; but ultimately, it is profitability driven by reproductive efficiency, cow cost, health and animal welfare. These can be improved with good grazing management.

After the second or third year of overgrazing, pregnancy checking ends with a 40% AI conception rate or a herd pregnancy rate of 75%. Circling the wagons, we ask "What happened? Was the bull bad? Is my AI tech slipping? Are my minerals not working?"

Overstocking has a large and long-lasting effect. Growing grass is difficult to replace with respect to its quality and price. One helpful key to reduce overgrazing and lengthen the number of grazing days is rotational grazing.

Dennis Hancock and the UGA Forages Team conducted research on the effects of grazing management. They found only 30-40% of forage is utilized in continuously stocked pastures vs. 50-60% utilization when strategically grazing five to six paddocks. Strip-grazing or mob grazing can yield 65-75% grazing efficiency. If improved grazing strategies increase the number of grazing days, feed cost should naturally go down.

A 1,200-lb. cow will consume approximately 2.0% of her body weight. The number of grazing days for one cow on a continuously grazed fescue pasture can increase by 10 days or more when rotational grazing is implemented. This can be greater, depending on the pounds of forage being produced per acre.

One other important aspect of grazing management to consider is soil pH. Many forages grow best in soils with a pH from 6.0 to 6.5, but can vary slightly based on the forage being produced.

After taking soil samples gathered according to proper sampling recommendations, the results guide an individual operation on where to focus lime application, if any. This in turn allows for more effective utilization of fertilizers. Fertilizer application without proper pH is a waste of time and money. With proper soil pH and adequate nitrogen, phosphorus and potassium (NPK), the forages in question have an optimum chance for production if weather cooperates and grazing is managed properly.

Routinely resting pastures is a necessary part of improving pastures. Strategically resting pastures allows desirable plants to reestablish, which further helps reduce erosion and improve water retention. Resting periods differ amongst species and time of year.

In general, it is ideal to turn cows on grass a week prior to going to seed, and then pulling them off when grazed to a minimum recommended height for that forage. Cool-season forages, for example, can be grazed to 4 inches and then rested.

Implementing rotational grazing strategies with a focus on grazing height will help maintain soil pH, improve forage production per acre, reduce fertilizer needs, reduce cost, improve overall animal productivity, and improve herd temperament. That's a defining decision with substantial effects.

Midwest Region

by Eric Bailey

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The cow-calf business is tough, and getting tougher in 2022. In



the good times, it is a low-margin, low-cash flow business model. With input prices skyrocketing, now is the time to look at the data from your operation or start gathering data that will allow you to make informed decisions in the future. I think one area that needs greater attention is how our breeding decisions have affected cow size and how changing cow size can affect carrying capacity.

Many producers make great efforts to maximize weaning weight. They do that by selecting bulls with the highest weaning weight expected progeny difference (WW EPD), creep-feeding, leaving the calves on the cows as long as possible, etc.

In my opinion, there is a metric much more important than weaning weight. I am more interested in weaning weight expressed as a percentage of a cow's body weight. For example, a 1,200-lb. cow weaning a calf that weighs 600 lb. has weaned 50% of her body weight. How about a 1,600-lb. cow that weans a 400-lb. calf?

There are plenty of ways to put your thumb on the scale of this metric. I usually adjust cow BCS to a 5, by subtracting 100 lb. for every BCS above 5. I also calculate average daily gain of the calves from birth to weaning and use that to calculate a 205-day, adjusted weaning weight.

Many extension specialists across the country have embraced the virtue of this metric and found a very interesting relationship. The heavier a cow gets, the smaller the percentage of cow weight weaned is, regardless of the production environment. I have seen data from Kansas, Texas, North Dakota and Georgia show the same relationship.

Think about it this way. If I manage 50 cows and they weigh

1,000 lb. each, then I have 50,000 lb. of cow. If I have 50 cows that weigh 1,400 lb. each, I have 70,000 lb. of cow. Can my land support 70,000 lb. of cow, or do I have to feed hay for 90-120 days each winter to make up the pasture forage deficit? Would I be better off managing 50,000 lb. of cow instead? What if that 70,000-lb. herd weaned 45 calves weighing 550 lb. on average (24,750 lb.)? The herd weaned 35% of its body weight.

Let's drop the cow size down to 1,000 lb. per cow, but keep weaning weight the same. Now you are weaning 49% of the cow weight and you have 20,000 lb. less of cow to feed each winter. That's the weight equivalent of 14.25, 1,400-lb. cows. If each cow needs a bale of hay per month and you feed for 90 days each winter, then you have saved 43 bales of hay each winter on a 50-cow herd.

What about the scenario where instead of 50 head of 1,400-lb. cows, we run 60 head of cows that average 1,250 lb.? Remember, the 1,400-lb. herd weaned 24,750 lb. of calves. Now we have 54 calves (90% weaning rate) weighing 550 lb. each. We would wean 29,700 lb. of calf instead (an extra 4,750 lb. of weaned calf).

Cow size has been a hot button topic for a while, and I have been firmly in the camp of moderating cow size. The math above is why I feel so strongly about it. Think about weaning weight as a percentage of cow body weight next time you are working on farm records. They might be a key part of navigating through these rough times. **AJ**

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