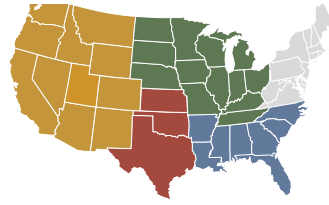


ANGUS ADVISOR

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



Southern Great Plains

by David Lalman

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As of late February, most of the Southern Great Plains region was considered to be in long-term moderate to exceptional drought according to the National Drought Mitigation Center. Except for a wet June in 2022, more than 70% of the region has been rated in the moderate to exceptional drought categories each month since the dry period began (September 2021).

While feed availability and cost remain the primary factors driving herd liquidation, water availability and water quality are of increasing concern. In general, minerals and other contaminants concentrate in both surface and groundwater sources during long-term drought.

Water quality is a function of the concentration of elements or substances that may compromise livestock health and performance or result in toxicity. It is not uncommon to drill a new water well in Oklahoma only to discover “brackish” water. Brackish water generally contains high concentrations of salt and other potentially dangerous minerals or other compounds, such as sulfur and nitrate.

Total dissolved solids (TDS) concentration is a good place to begin in monitoring water quality

and to consider the use of brackish water as a drinking water source for cattle. Most recommendations suggest cattle drinking water contain less than 5,000 parts per million (ppm) TDS. Water containing 5,000 to 7,000 ppm TDS should not be consumed by pregnant or lactating cattle, and consumption of water containing greater than 7,000 ppm TDS should be avoided altogether.

We have had several reports of water sulfur concentration increasing in western Oklahoma groundwater sources. While maximum tolerable sulfur concentrations in drinking water for cattle are not well defined, the National Academies of Sciences, Engineering and Medicine (NASEM, 2016) recommends less than 500 ppm (or mg/L) for calves and less than 1,000 ppm for adult cattle. Consideration must also be given to forage and concentrate feed sulfur content in combination with water sulfur content.

The good news is that water quality is not difficult or expensive to test. Our laboratory at Oklahoma State University (Soil, Water, and Forage Analytical Laboratory) charges \$15 per livestock water sample. For that, you get sodium (Na), calcium (Ca), magnesium (Mg), potassium (K), iron (Fe), zinc (Zn), electrical conductivity, pH, nitrate-nitrogen, Cl⁻, sulfate, TDS and hardness.

Here is how you can obtain and

ship a water quality sample to a testing laboratory:

- Most county extension offices can assist with this process.
- Obtain a clean 4-ounce plastic water bottle (our laboratory recommends glass bottles). A wide-mouth bottle with a screw-on lid works well.
- Go to the water source you want to test.
- Fill the water bottle halfway, shake and rinse the bottle, and pour out.
- Repeat the previous step three more times.
- Finally fill the bottle as full as possible. Cap, leaving as little air space as possible.
- Be sure the bottle is well labeled, and the laboratory’s submission form is completed and included in the shipping container.

Just because a water quality test comes back from the laboratory as “brackish,” does not mean it cannot be used for livestock. Once the chemical composition is determined, it may be possible to blend the brackish water source with a more purified source, such as rural water, to dilute the minerals down to a safe level. Be sure to consult your veterinarian and a nutrition expert to investigate and monitor water quality in concert with your supplementation program.

Western Region

by Randy C. Perry
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Fall-calving herds

Main focus: cows and calves are on cruise control

1. Start planning for preweaning vaccinations.
2. Continue your mineral supplementation program. Consider injectable mineral products in addition to loose, block or tub mineral products.
3. Fall-calving cows and calves should have very few problems with animal health at this time of the year.
4. Spring is an excellent time of the year to work on general repairs such as repairing and building fences and other facilities. Also, if irrigated pastures are part of your pasture resources during the summer months, make repairs to irrigation systems before they are needed later in the spring.

Spring-calving herds

Main focus: prepare for the breeding season

1. Decide on artificial insemination (AI) sires, and get semen ordered early to avoid last-minute problems with semen delivery. The most important decision each year in a purebred operation is sire selection.
2. Consider all information and try to find the bulls that combine expected progeny differences (EPDs); genomics; phenotypic traits; and “old-fashioned” convenience traits like longevity, udder structure, disposition and mothering ability.
3. Decide on a synchronization

protocol if you are going to use estrous synchronization. Many excellent systems are available, and many of the timed-AI protocols offer very satisfactory results.

4. Heat detection is the key to a good AI program, unless you are using a timed-AI system.
5. Don't overlook the importance of good and precise semen handling.
6. Get bulls semen- and trichomoniasis-tested far in advance of the breeding season. Therefore, if problems arise, replacement bulls can be located.
7. Focus on becoming a better grazing manager — it can have a huge effect on your bottom line.
8. Mineral supplementation is extremely important at this time of the year.
9. Try to maintain the optimum level of body condition [body condition score (BCS) of 5 to 6] through the calving and breeding season.
10. Normally by late spring, forage resources are at their peak from both an energy and protein standpoint. Usually supplemental feeding is not needed at this time of the year.
11. Make certain females and service sires are vaccinated at least 30 days prior to the start of the breeding season.
12. Treatment protocols and products should be on hand for both scours and pneumonia in suckling calves.
13. Late spring is a good time to spray fencelines and get irrigation ditches or lines in good repair if irrigated pasture or hay fields are included in your operation.

Southeast Region

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If we don't plan, we plan to fail. Likewise, if we don't invest in the future, we will be left with very little down the road. Some investments may require substantial money, but many worthwhile investments will require very little monetary input. Let's look at three aspects of investing in the future that often require minimal financial input.

1. Investing in reproductive success. Reproductive success is paramount for cow-calf profitability. Improving feed efficiency, growth, marbling or any other trait is unlikely to have a similar positive economic effect in cow-calf operations as improving reproductive success. Nevertheless, we often associate efforts to increase reproductive performance such as estrous synchronization and AI with increased input costs. Still, these technologies should be considered as “icing on the cake” of reproductive management.

The bulk of improvements in fertility are observed with the adoption of commonsense practices that do not necessarily require significant investments up front. Things like having a controlled and short breeding season (equal or less than 70 days) while culling nonpregnant cows can have significant effects on fertility. Also, selecting replacement heifers that are born early in the calving season has a considerable effect on cow herd fertility. Adopting these practices does not require a major investment up front. Arguably, depending on the operation, they don't require any monetary investments at all.

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2. Investing in sharing your program's story.

Certified Angus Beef (CAB) has renewed Beef Quality Assurance (BQA) as one of its main focal points. CAB's "Cut the Bull" messaging refocuses our attention on the exceptional work producers do to properly care for their herds. In recent years, animal welfare has been identified as the single biggest issue that consumers are concerned about. When producers tell their story through the lens of BQA, consumers are educated about an industry that they are curious about.

Obviously, BQA certification for everyone on your operation requires almost no expense, but it can be a starting point to cut the bull that we are up against when competing with false claims about beef production. Make sure your BQA certification is up to date. Go to www.BQA.org to be certified or to get a fresh start.

3. Investing in genetics

Investing in genetics isn't always a bull purchase. One of the best ways to invest in genetics is to simply study cattle and data. We can study how well our mature cows are fitting into the environment based on how much supplemental feed is purchased to maintain body condition and looking at pounds of calf weaned per cow exposed. Getting rid of late-calving cows and investing in heifers that breed in the first 21 days of the breeding season are a long-term investment in genetics that are documented to pay dividends. Through a focus on reproductive success, BQA and herd genetics, we can expect a brighter future.

Midwest Region

by *Eric Bailey*

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The best advice I can give for "investing in your future" is to run your livestock operation like a business. There are far too many operations built upon a shaky business model that produce too little cash flow and require an off-farm income to meet cash flow requirements.

In our business, a cow-calf production system is what many folks aspire to operate. I am as guilty of this as anyone else. However, how many of y'all have tried to pencil out paying for a loan on land using cow-calf pairs? It is difficult for cows to pay for themselves, much less make a land payment. A mental model I hear often is a beef cow herd is like a savings account. You invest in it, and over time it accumulates. We will not bring the next generation back to the farm or ranch with this mindset, as it's focused on equity, not cash flow.

Equity businesses are great for folks who have wealth already and are willing to divert cash flow to the business for the purpose of long-term capital appreciation. Equity refers to the value of the assets (cows and land) of the business minus the liabilities (loans against cows and land). Once the cows and the land are paid off, great! They can be an evergreen source of income. As you upgrade the genetic base over time, the cows can appreciate as well. Land is one of the steadiest investments a person can make. But it takes money to make money in this model.

What can a young person without a financial backer, a large inheritance or a rich husband/wife do? One option to get started from scratch is lease land and custom-graze cattle for someone else. In a sense, you become the middleman, grazing someone else's cattle on another person's land. I like custom-grazing stocker cattle that have been backgrounded for 60-90 days in the spring on fescue in Missouri. We get such a dramatic flush of growth on pasture in the spring I can run 1.5 to 2 head per acre from about the first of April to the first of July. With no supplemental feed, these calves can gain 1.5 to 2 pounds (lb.) per day, easily.

The trick is to get them off fescue before the "summer slump" occurs. Cattle do not gain much (if any) in July and August on tall fescue pastures. The cattle owner pays me per pound of weight gained by the calves, and it is a short-term business. No feeding hay in the winter or need for investments in costly equipment. I am being paid for my skill in animal husbandry and grass management.

Be creative with your cattle business, but understand crucial business fundamentals. Focus on businesses that generate cash flow, not ones that require you or your spouse to have an off-farm job. Invest in your knowledge of how businesses operate.

It will benefit your business more in the long run to attend a business school like Ranching for Profit than to attend a school to learn how to artificially inseminate cows. The classic book by Michael E. Gerber, *The E-Myth*, says it best: strive to work on your business, not just in it. **AJ**