

If the cows have not cleaned by 24 hours, we administer a prostaglandin injection as the first treatment. If they don't clean in response to that injection, then we administer another prostaglandin injection combined with a treatment of antibiotics, either given intramuscularly (IM) or mixed with sterile water and infused directly into the uterus.

- 4. Body condition score.** The target level of body condition at calving is a body condition score (BCS) of 5.0 (scale = 1 to 9) for mature cows and 6.0 for 2-year-old heifers. Both protein and energy requirements need to be met in order to achieve the desired level of body condition.
- 5. Bull and heifer development.** Both bulls and heifers should be performing at levels that will allow achievement of desired average yearling weights. Our target levels of performance here at the University when developing bulls and heifers from weaning to yearling are 3 to 3.5 pounds (lb.) per day for bulls and 1 to 1.5 lb. for heifers.
- 6. Treatment protocols.** Have treatment protocols and products on hand for both scours and pneumonia in suckling calves.
- 7. Selection of AI sires.** Although the breeding season is still months away, now is the time to start developing a list of potential AI sires. In my opinion, this is the single most important factor determining the success of purebred cattle operations.
- 8. Development of a marketing program.** Winter is also a

good time to put some serious thought into developing a creative and effective marketing program. If you do not feel comfortable in this area, there are numerous marketing consultants who can provide excellent advice in this area.

## Southeast Region

by Jason Duggin

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The topic of cow size could lead to some tough conversations at our operations. Cow inputs account for most of an operation's expenses on a per-head basis. With that in mind, let's look at cow weights and how they might affect net return.

Cows in peak lactation require forage and/or feedstuffs providing at least 60% total digestible nutrients (TDN) and 12% crude protein (CP) per head per day.

Using those requirements, a 1,200-lb. cow needs 24 lb. of dry matter; a 1,400-lb. mature cow needs 27 lb. dry matter; cows weighing 1,600 lb. need approximately 31 lb.; and an 1,800-lb. cow requires 33 lb. These are approximations based on weight, but they do not account for adverse weather, breed type and genetic differences in the cow population.

Each pound of forage and feed has a cost assigned to the bottom line. If heavier cows can wean additional pounds, then there is hope — but do they wean heavier calves? This is a question we need to answer on our own operations.

For illustration, let's expect mature cows should wean at least 45% of their body weight in pounds of live calf. Using 45% as our standard, here are example cow weights (lb.) and

corresponding calf weights (lb.): 1,200 cow — 540 calf; 1,400 cow — 630 calf; 1,600 cow — 720 calf; 1,800 cow — 810 calf.

Many may ask why anyone would have 1,600-lb. or 1,800-lb. cows. They happen more than we might think. Weighing and recording cow weights annually is a great way to monitor cow nutrition and health. As the saying goes, the scale doesn't lie.

As an anecdotal example, I broke down some of the recent weaning weights and corresponding cow weights on cows 3 to 12 years old at the Research and Education Center in Rome, Ga.

Here is a summary of cow weight groups in roughly 100-to-150 lb. increments and the corresponding percentage of calf weaned. The 59 head of cows weighing between 1,220 and 1,395 lb. weaned calves weighing 617 lb., with a percent dam weight weaned of 45%. The 56 head of cows weighing between 1,400 and 1,495 lb. weaned calves averaging 617 lb. exactly like the previous group, but resulting in 41% of dam weight. The 24 head ranging from 1,500 to 1,600 lb. weaned calves weighing an average of 613 lb., which is 39% of dam weight. Lastly, 10 head weighing between 1,605 and 1,695 lb. weaned calves averaging 611 lb., or 35.5% of dam weight.

Looking at these numbers, we can see cows weighing more than 1,400 lb. did not meet our standard of 45% in this example. This is a lenient number. Ideally, commercial cows would be weaning 50-60% of their weight with sufficient rainfall.

In the above example, which group of cows brought the most net return to the operation? These are tough conversations on our operations.

However, using a set of scales and expected progeny differences (EPDs) associated with cow cost such as mature weight (MW), cow energy value (\$EN) and weaned calf value (\$W), for example, can be helpful tools to improve the bottom line.

## Midwest Region

by Eric Bailey

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There are so many “tough conversations” I would love to have with beef producers. Unfortunately, I can only select one for this column, so here it goes.

Many of you are excellent cattle managers and poor forage managers. Specializing in one of the two key aspects of your business is holding it back. Sadly, much of our society is hyperpolarized today.

This is another area I feel suffers from the same malady. Excellent cattle managers are rarely profitable, because they are so heavily invested in equipment and inputs. Excellent forage managers underutilize reproductive management tools and chase niche genetics.

Do you need a tractor to raise cattle? I started a custom grazing operation about 12 months ago, and that was a question that guided much of my initial planning. Mowing weeds in August may make my landlord happy, but it is a terrible decision for my business.

Depreciation is the silent killer of cattle operations. For example, I estimate it costs about three times as much per pound of feed to swath, rake, bale, store, transport, feed and have cows waste hay as it does to make the cow harvest it.

I am fiercely opposed to regularly

feeding hay in the winter. A common question in response to this argument is, “What will I do instead?”

That is the wrong problem to focus on. The real problem is the disconnect from the original business model. The original beef-cow business model is to convert sunlight into steak. Pasture forage is the medium of exchange in this relationship. When cow-calf producers focus solely on genetics, weaning weight, quality grade, etc. (cattle-centric performance metrics), they lose sight of the bigger picture.

A cattleman has two significant areas of focus: pasture performance and cattle performance. Lots of people brag about 650 lb. weaning weights, but no one ever brags about forage yield or how little hay was fed over the winter.

Feed represents 60% of annual cow costs. Hay is a big part of that expense in much of the country.

While on the topic of hay, how many operations treat stocking rate as a fixed unit, rather than a dynamic one? If someone tells you it takes x number of acres to run a cow in your county, treat that as friendly advice, not gospel. Ultimately, stocking rate is a function of forage demand (how much they eat in a day), forage growth rate and forage utilization rate. A false assumption is that carrying capacity is set in stone. Carrying capacity is both a function of the land and how it is managed.

Continuous grazing systems (cows grazing the same pasture year-round) only harvest a quarter to a third of the forage produced in a year. We use the term “harvest efficiency” or “forage utilization rate” when describing the proportion of

forage in a field grazed by a cow. A simple rotational grazing system will increase harvest efficiency from 25% to 40%. That is 60% more feed that ends up in a cow’s mouth.

Further intensification of grazing management will raise harvest efficiency above 40%. Hay is not a more efficient harvest of forage than grazing. It is equal to well-managed grazing, at best.

When a field is harvested for hay, 75% to 80% of the forage is removed. On the surface, that far surpasses the harvest efficiency of continuous grazing systems. However, less than 100% of the mechanically harvested forage ends up in a cow’s mouth. We still have to factor in storage and feeding losses. Typical estimates of storage losses are 10%. Feeding losses vary greatly; I assume a 20% loss during feeding in most cases.

The best thing we can do to improve beef cattle production in 2022 is to start treating cow-calf operations like a business. How do I cut input costs and increase revenues? Start by spending a little more time out of your comfort zone. If you like reading sale books and EPDs, go out and monitor your forage and design a grazing system that will allow you to increase forage utilization, increase stocking rate and reduce hay feeding. **AJ**