

## BeefTalk: Finding the Right Cow Size is Not Simple

**Bigger and bigger cows may not be the best option.**

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The beef industry has tremendous potential for growth within individual cattle.

But just because we can, does that mean we should?

Sound cattle management focuses on maintaining growth and efficiency and, in many operations, pushing for improvement. The fear of paths that may take an alternative route is real. Like life, management of alternatives with only a partial knowledge of the outcome amplifies concerns.

Without question, the incorporation of alternative management programs is not easy. If a management or selection protocol is working, why not just continue? Well, that would be like a building contractor adding floor upon floor to a single-story building. If the foundation design was for a single floor, eventually the foundation will fail and the building will collapse.

Cattle are no different. The cattle industry always will have a point where too much of a good thing will become a challenge.

Let me tell a story. The point at the end will be perplexing.

Once upon a time (2008 to 2011), two groups of cows were born at the Dickinson Research Extension Center Ranch near Manning. One group's frame score was 2.6; the other group was 4.9. Some said those smaller cattle certainly must be for entertainment because the cows were quite different.

No, these were real cattle, not a sideshow. Although I must admit to some head scratching and doubt as to the functionality of the smaller cows.

As the small-frame cow herd number increased through time, the bulk of the discussion centered on frame size. The original objective was to develop a herd of smaller cows for grazing on the range research project at the center. As the smaller cows came into production, they replaced the largest cows.

Here's an important point: The smaller cows were daughters of cows that had significant growth, as evident by the cows' mature weight. Hold onto that thought.

The result was two herds: one smaller in frame and one medium in frame. The larger-framed set of cows, which were typical heavy-frame, score 6-plus types, were sold because the center did not have pasture for additional cows. As calves, the smaller cattle averaged 38 to 40 inches at the hip at fall weaning, thus an average frame score of 2.6; the larger cattle as calves were 43 to 44 inches at the hip, a frame score of 4.9.

As time passed, the moderately framed cows were called "beef" and the smaller-framed cows were called "range." I would imagine that some internal bias was involved in calling the medium-framed cows "beef," but that should come as no surprise. And in keeping with the original objective to develop a herd of smaller cows for grazing on the range research project at the center, the smaller cows seemed to simply fit the "range," or grass-based concepts, better.

I guess, for many, suggesting a frame score 2.6 cow would be called "beef" would seem inappropriate. At least an occasional raised eyebrow would suggest that. And yes, I must admit, I, too, would shake my head as the frame 2 to 3 would walk by.

Remember, the beef industry depends on numerous connective links from the conception of the calf through birth, growth, harvest and fabrication all the way to the end user. Keeping this process in focus is not easy. Seedstock breeders need to produce bulls that commercial producers can use to sustain a family with income and yet leave something for the next step.

The next step is the real question. Just how big is the step? How many steps does the commercial producer leave for someone else? Currently, the beef producer has the option to place more than 1,000 pounds of carcass beef on the rail.

So just because you can, does that mean you should? What does the concept of not putting a 1,000-pound carcass on the rail look like? How much cow mass does the commercial cattle producer need to stock?

Well, back to the story. The center has two herds: One herd could put an average 1,000-pound carcass on the rail; one could not. But before we go there, let's walk through time and the descriptive data from the center cow herds.

First, the "range" herd as calves had an average 205-day weight of 506 pounds. The cows weighed 1,019 pounds at 2 years of age, 1,082 pounds at 3 years, 1,162 pounds at 4 years, 1,234 pounds at 5 years, 1,271 pounds at 6 years, 1,318 pounds at 7 years and 1,313 pounds at 8 years. Their average mature weight was 1,295 pounds.

Second, the "beef" herd as calves had an average 205-day weight of 616 pounds. The cows weighed 1,190 pounds at 2 years of age, 1,308 pounds at 3 years, 1,414 pounds at 4 years, 1,519 pounds at 5 years, 1,532 pounds at 6 years, 1,513 pounds at 7 years and 1,493 pounds at 8 years. Their average mature weight was 1,522 pounds.

Drought forced the sale of the two herds in the fall of 2017. The "range" cows weighed 1,308 pounds. The "beef" cows averaged 1,580 pounds. Really, this was 2.6 frame cows weighing 1,308 pounds. More later.

May you find all your ear tags.


For more information, contact your local NDSU Extension Service agent (<https://www.ag.ndsu.edu/extension/directory>) or Ringwall at the Dickinson Research Extension Center, 1041 State Ave., Dickinson, ND 58601; 701-456-1103; or [kris.ringwall@ndsu.edu](mailto:kris.ringwall@ndsu.edu).


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Attachments

 PDF - NDSU Dickinson Research Extension Center Average Weight by Age (NDSU\_Extension\_Service\_Beeftalk\_021518.pdf - 21.12 Kb)

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