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Does Your Stocking Rate Need Adjusting?

David and I have had a very good group of folks gathering at the Northeast Kansas Heritage complex on Wednesday nights to discuss land leasing issues. I've been working on the pasture lease presentation, and it seems a topic to be worthy of discussion in the news column this week as well. A factor that is very specific to pasture rental arrangements is stocking rate, so let's take a look and see if your rate, or maybe your mindset, might need a tweak.

One thing that always seems to surprise me is the way different people talk about stocking rates. Head per pasture, acres per head, pairs for the season, pounds of grazing animal per acre, etc... That said, sometimes the discussion needs to start by defining the unit of measure so both parties are speaking the same language. The best "standard" would be to use Animal Units (AU) which equates to 1000 pounds of grazing animal. This lets us move between species and classes of livestock within species using Animal Unit Equivalents (AUEs). For example: AUEs are calculated at these levels: yearling lamb - 0.15, yearling steer - 0.60 or horse - 1.25.

When it comes to stocking rate, it is not uncommon to hear statements like "*Grandpa used to graze 100 cows on this pasture all summer and now I've got to rotate them out after four months with only 90 cows. What's wrong with that pasture?*" Often, there's nothing wrong with the pasture, although many producers might increase pasture productivity by using improved grazing techniques, fertilizer, weed/brush control and other focused management. Most often, the problem actually is the cows or, more precisely, how producers count the cows.

A hundred years ago, most cows were often straight bred British, small framed, easy keeping foragers, who weighed around 1,000 lbs. They calved in spring and started grazing with a calf weighing about 100 lbs. Today, it's not unusual to have 1,400-lb. cows (or even larger) with winter born calves weighing 300 lbs. when they start grazing. That's a big change, from a 1,000-lb. cow with a 100-lb. calf to a 1,400-lb. cow with a 300-lb. calf. That's 700 lbs./pair, with a dramatic change in forage demand, but head count is the same.

Cattle will consume 10-20 lbs. of green grass for every 100 lbs. of body weight. Larger animals tend to have a higher maintenance requirement and need to eat more before converting energy into milk or growth. Using the example above, today's cow-calf pairs eat almost 50% more when they start grazing than the pairs of years ago ate and just looking at the head count can lead the producer astray on stocking. It might be fun to brag about large individual weaning weights at the coffee shop, but weaned pounds per acre and increased Animal Unit Months (AUM) per acre, probably gives you more bragging rights in the enterprise profitability arena.

If you want to take grazing management and effective leases to the next level, vocabulary and stocking mindset needs to change from head count alone to several contributing factors first. Here is a quick run-down of those terms, in addition to AUE discussed already.

- Animal Unit Month (AUM): air dried forage one animal unit consumes in one month
- Carrying Capacity: amount of forage a land unit can produce at maximum utilization rate
- Stocking Density: number of AUE in a specific area at a single point in time
- Utilization Rate: Amount of foraged produced to be harvested by animals

I'd challenge you to dig into these concepts and work on a mindset change from head count stocking rate to AUE stocking rate as your guide for the grazing animal. Then, if you add better grazing management, increase forage quality, do weed/brush control, improve water developments, your pastures could perform even better than they did for your ancestors. "[Stocking Rate and Grazing Management](#)" MF-1118 is a good K-State publication to reference.