

WHAT'S REQUIRED TO BREAK THE "BEEF PER ACRE" KENTUCKY RECORD

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As I approach the task that Garry assigned me, I ask the question, "Do I really want to attempt to produce 1400 or more pounds of beef per acre?" An easy answer is "yes," but more likely "no." Most farmers I know, full or part time have all they can do now and to reach record levels of anything requires much more time and management. I am going to attempt to discuss the steps I think that will be required to reach record breaking production. Higher gains are certainly possible. We know alfalfa can produce 8 to 10 tons of yield per acre, much more with irrigation. I will take a plant, animal, and management approach to address this issue.

When we set the "pounds of beef per acre" record in 1991, we had a very good growing season. So pick a good year. Pick a productive soil that is well suited for alfalfa. You must also have a very productive stand of alfalfa, the kind of stand that is needed for top hay yields. At least five plants per square foot. Fertility must be in the high range for all nutrients. pH should around be 6.5. Hopefully you will have a high yielding variety of alfalfa. It will take 6-8 pounds of forage or more to produce one pound of gain; the stand will need to produce 5 to 6 tons of forage per acre to have chance of breaking this record. We mowed some of the field for hay in the spring so we would have more land area to add to the system as you move into hotter, dryer weather. Try to have shade and a sacrifice area to use when it's muddy.

Just as you need a good soil and stand to break records, you need the right cattle. Since smaller calves have a lower maintenance requirement, more of what they eat will go towards gain. Our heifers weighed 482 pounds when they started. You probably don't want to be much lower than 450. They need to be healthy, growthy, and in only moderate flesh. If the calves are fat you don't stand a chance. We started with a 4000 pound per acre stocking rate. You need a high enough stocking rate to keep the alfalfa in a vegetative state. You will be adding and removing calves throughout the summer based on weight and forage availability; you must have a scale. You must have a good health program, implant the calves, and use a growth promoter, we used rumensin. It is to your advantage replace some of the calves as they get bigger, maybe 600 pounds or so and replace with smaller calves. Our calves gained 1.3 pounds per day, remember calves must gain enough to cover their fixed cost; after that more calves per acre will increase the rate of gain per acre.

Most of you can do all of the things I talked about above. The real key to making this work is time and management. You must have a very intensive grazing management system. We moved our cattle every two to three days. The more often you move the cattle the more efficiently you can harvest the alfalfa, giving you a better chance to obtain top gains. Many dairymen move lactating cows every few hours to get top milk production, you might want to consider using temporary fence and cutting fields into smaller sizes and more as often as you can manage. You need to graze the alfalfa down close to the ground. I think by making the calves graze the whole plant, stems as well as leaves, helps with the potential bloat problem. You need to see these calves at least twice a day to catch any problems early and remove that calf or calves and replace with others. Remove any calf that appears to be gaining slower than the others. You need to watch the alfalfa so you can move at the right time. Don't let the calves get overly hungry; you can set yourself up for bloat.

To make this work, you need to be watching the weather, the livestock, and the forage; sometimes this can be a bit overwhelming. These are my thoughts on ways to improve your grazing operation, even if not using every technique. Almost every technique discussed will help you bottom line. We didn't do everything I have mentioned, we just got lucky.