

Adaptation verses Cultivation

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If you'll forgive me for deviating from writing about strictly production-related topics, I'd like to offer some general thoughts and observations. As you read the following comments, don't think of them as absolute truths or any sort of final word on a given subject. I encourage you to simply think about how these concepts apply to your situation. They might also be good discussions to have at your daily breakfast spot or your next producer association meeting.

Almost every decision in cattle management has the underlying choice of whether to produce within the parameters of what the unaltered environment allows, or to modify (i.e. cultivate) the environment to support a specific product we want to produce. There seems to be much more discussion in the past decade about moving toward adaptive methods of producing food and reducing the use of more modern technologies. By definition, the distinction between agriculture and hunting/gathering is that some modification of the environment is applied in the former. Aside from a few extreme opinions, that's been considered a positive attribute of humans for millennia. So positive, in fact, that we have enough food for 98% of the U.S. population to do other things with their time without dedicating most of their lives to raising their own food.

As an example, consider the American Bison during settlement of the U.S. Great Plains. They were consumed at a faster rate than they could reproduce and were eventually depleted to near extinction. It became obvious that they needed to be harvested at a slower rate to avoid completely exhausting that resource. The alternative would have been to "cultivate" the species such that it reproduced rapidly enough to accommodate the rate of consumption. That didn't seem to be the best approach, so reduced harvest was the result. For domestic cattle on the other hand, enhanced cultivation has historically been the favored approach for adapting to increased consumption. I'm getting dangerously close to invoking the laws of supply and demand, so we should move on before I leave my discipline and start discussing economic principles. Just keep in mind that what we are really discussing here is how we interact with the natural environment while responding to a combination of personal preferences and market dynamics.

For a commercial cow/calf operation, at a given selling price, profitability is dictated by pounds of product produced per acre and there are several ways to move the needle on that measure. Ultimately though, reproduction has the largest impact. Understanding that each commercial cow has to generate a saleable product at the end of each production cycle – either a calf or the cow itself – makes it clear that reproduction is the limiting step to profitability. All the other decisions from that point are made to support reproduction; either directly or indirectly. It's the same for every other agricultural commodity, we have to (re)produce more of that commodity to continue the lifecycle with enough left over to eat.

So, what is the sweet-spot where adaptation and cultivation come together to support sustained profitability? Or, the better question might be, how do you find that sweet spot? Here's where the discussion gets a bit interesting (maybe even philosophical) and we need to keep asking questions. Do I want to manage your cattle to reach the absolute highest level of production physically possible? Or, would I rather simply turn the cows and bulls out and see what you end up with? The answer most likely falls somewhere between those two extremes and it depends on a vast set of variables. Moreover, the answer probably changes over time for each farm or ranch family.

Here's another extremely important question – How important is profit from my cow herd? I'm sure that seems like a strange question for many of you, but some cattle ownership is legitimately driven more by recreation or as a coincidence of land ownership than by profit. If your objective is to be profitable, there are still more questions to answer. How much time can I dedicate to managing my land and cattle? How important is cash flow in my situation? Do I have any personal convictions against using specific technologies? Hopefully the answer to that last question is based on, and marketed by, reality rather than perception.

Since economics is defined as “the study of scarcity”, i.e. studying how limited resources are allocated, all of these questions lead us back to talking about economics (my apologies to actual economists that might be reading this). Your answers can help you decide which management practices fit your objectives. Finally, you can intentionally begin to implement the level of environmental modification that fits well for you or your family.

Again, this article is intended to stimulate some thought and hopefully inspire some intentionality in the way you approach managing your land and cattle. For some of you, all this might lead to a low-input situation with very little modification of the environment and use of very few modern technologies. For others, your answers might lead you to very intense management and use of cutting-edge technologies. An interesting caveat is that intense management doesn't always mean intensively changing the environment you operate in; it can also mean intensively adapting to a less modified environment.

In my opinion, a beef cattle producer can fall anywhere on this spectrum between pure adaptation and rigorous cultivation while still being a responsible steward of the land and cattle they own. I also think that, with a healthy dose of both respect and humility, we can become better at achieving whatever our goals might be through observing and listening to as many different approaches as we can find. Thanks for reading this far in an article that's much longer and very different from what I usually submit. I hope you'll take time to send me some feedback or chat with me at a meeting. In the meantime, I'll get busy finding more specific production topics to write about.