



Three Steps to Building a Profitable Grazing System

AgriProfit#
Technical Bulletin

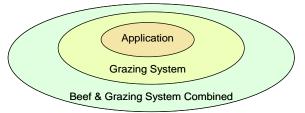
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Your local forage or research association field day is an ideal place to take stock of what you are doing with your grazing system and learn about crop and systems options to make profit-driven improvements. As you view the plots and demo's, a few key questions should come to mind:

- Can I do this?
- Will this application "pay" on my farm?
- Will this make my grazing system "better"?
- Will it improve my beef enterprise's costs?

Producers make a reasonable attempt at the first question, but the latter three can often be problematic. To improve profitability in beef cow/calf operations requires managers to go beyond grazing yield and examine the economics of their grazing systems. Whether you are evaluating your current system or charting forward a new combination, using a three step process (Figure 1) will reduce the unknowns and focus on the economics at each level.

Figure 1: Grazing System Evaluation Steps



"Cost" or "Profit" Center

First, an old grazing paradigm needs to be recognized. When grazing is viewed as a *cost center*, the tendency is to minimize expenses and directly or indirectly shorten the grazing season.

Furthermore, a recent *AgriProfit*\$ economic analysis¹ showed that *cow herd feed costs per Animal Unit Day (AUD) commonly exceed the daily cost of grazing*. This added to cow/calf operators' motivation to evaluate their feeding and grazing systems.

Finally, when the grazing system is viewed as a *profit center*, a more effective balance is struck between productivity and cost per Animal Unit Month (AUM). Grazing is treated like any other

crop and, as a result, the land can earn a profit relative to its productive and economic potential.

Evaluating A System

A systems evaluation involves assessing what each of the components contributes to improved profitability, given:

- Each element is profitable in its own right, and
- The sum of the elements reduces overall costs, improves overall value of production, or a combination of both.

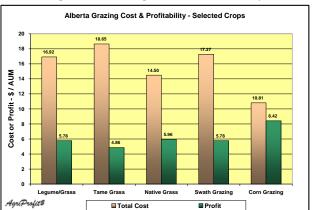
Before diving straight into budgeting, it is critical to understand the context of the evaluation process. For a grazing situation, this is laid out below.

Step 1: Individual Grazing Options

Whether you are evaluating your existing system or entertaining changes, the starting point is to assess each field's basic unit costs, returns (at a reasonable market value) and resulting profit. It is in this step that knowing your own unit costs per AUM (from per acre) pays off. With your own expected costing and productivity information, decisions on continuing a grazing application, taking on a new practice or bringing in a new crop become more effective.

For crops that you have experience in, the profitability question is answered by your budgets based on historical performance. If you are budgeting a new practice or grazing crop, then using costing on your own comparable crops, or

Figure 2: Grazing Cost & Profitability







local benchmarks (as shown in Figure 2^2) are a good starting point.

The goal is to define, as best as possible, the full costs and returns. This goes beyond the primary costs of seed, fertilizer and chemicals to include other operating costs (eg. machinery operating, value of labour) and overheads (eg. taxes, depreciation, capital interest). It also includes a share of the cost for establishing perennial crops.

At the end of this step, the decision point is fairly straight forward. You only entertain a specific grazing option if it can be shown that it will be profitable over the long term.

Step 2: Grazing System Assessment

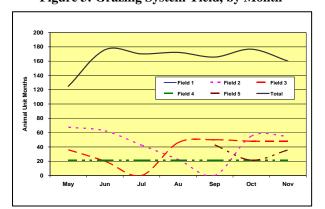
The next step involves accounting for the quantity, quality and timing of grazing dry matter delivered to your stock over the course of the grazing season. From the simplest to most complex system, producers are fairly adept at defining a grazing plan that delivers a targeted amount of grazing over the duration of the season. (Figure 3 gives a visual example of monthly field and grazing system production)

However, a system assessment that incorporates economics requires that the costs and value of grazing produced also be tallied (from Step 1). This exercise delivers a few key measures:

- Profitability of the whole grazing system
- Total cost per AUM raised (again, not per acre)
- The "flexibility" buffer the system delivers³.

An economic assessment of a grazing system provides the manager with a focus to design an enterprise plan that is profit-driven, not production-driven. Its strength is that it shows the value of balancing intensity, crop options and timing of delivery in dollars and cents. *Grazing system profitability is seldom achieved when the*

Figure 3: Grazing System Yield, by Month



focus is to minimize expenses.

Step 3: Herd and Grazing Combined

The final step starts with a simple tally of the current herd plus grazing enterprise costs and returns. The intent is to show net profit for the use of the herd and grass production assets combined⁴. This is the "base case" against which change options can be compared.

More importantly, this step offers opportunity to entertain complementary actions within each enterprise. For instance, a long feeding season may require a higher operating and capital intensity per cow. A shorter feeding season opens the door to less costly feeding systems that reduce herd operating and fixed costs beyond the simple feed cost savings.

Home Stretch

The grazing system analysis process comes with a set of decision rules that must be met, in a stepwise fashion⁵. In the long term, to be included in the farm plan:

- 1. Each field, practice or crop must be profitable (any change must add to field profitability), then
- 2. The grazing system must be long term profitable (any change must add to enterprise profit), then
- 3. The combined herd and grazing enterprises must be profitable (any change within either must be shown to improve overall profitability).

Using these three steps to take stock of your current performance and to evaluate opportunities that you see at the field days will put you on the path to business success.

Dale A. Kaliel

Sr. Economist: Production Economics Economics & Competitiveness Division





¹ Kaliel, Dale A., "Economics of Change for Beef Operations", *AgriProfit\$* Technical Bulletin, Jan./09

² AgriProfit\$ benchmark average annual costs and profitability, for native, tame perennial and annual grazing in Northern Alberta. Perennial crop estimates are for the grazing crop in production, and do not include establishment costs.

This is the difference between the value of grazing (noncash) and the cash cost of production. It's a contribution to farm cash flow during challenging times.

In this instance, the non-cash value of grazing produced and then used by the herd effectively cancels itself out.

In economics, these are called "necessary conditions", ie. a positive result at one level is needed to move on to the next.