



## Big Horn County producers use budget tools

By James Sedman and  
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Budget tools to help producers build a better risk management plan have been developed by the academic professionals at RightRisk.org.

The tools cover the partial, enterprise, and whole farm budgeting process and may be found under the Resources tab on the site. Each tool is an Excel-based worksheet with a short guide showing examples of each facet of the budget. In future articles, we describe how producers can use these tools to analyze past and future business actions and determine the best risk management strategies.

### Partial Budgeting

Partial budgeting might be considered a first step in the budget-building process; simply put, to determine the net effect on income and profitability of a smaller change in business operations. It is an important part of a comprehensive risk management plan.



### For more information

RightRisk.org offers a wealth of information and programs to help producers in their risk management decision-making process. This includes budgeting tools to help build partial, enterprise, and whole farm budgets. Each section includes a guide to help producers through the budgeting process. Simply visit [RightRisk.org](http://RightRisk.org) and click "Risk Management Tools" under the Resources tab to get started.

Partial budgeting can help a producer break down simple changes in an operation and evaluate the effects of those changes on overall risk exposure. This detailed breakdown helps a producer carefully consider alternatives for risk management.

The partial budget tool examines four potential effects of any change in operations: items that

add to net income (added revenue and/or reduced expenses) and items that reduce net income (reduced revenues and/or added expenses). The net effect on farm income can be calculated once the effects of all changes have been included.

### Big Horn County Farmers Look to Next Season

Like every crop and livestock producer in Wyoming, Big Horn County producers Ken and Rich

Riff are pondering the effects of drought on their coming production season. The brothers farm several hundred acres of sugar beets, dry beans, and other irrigated row crops. A detailed profile of the Riffs' operation and risk management is available at [RightRisk.org](http://RightRisk.org) under the Resources link, then click on Risk Management Profiles.

The Riffs are expecting reduced irrigation water supplies due to drought and are trying to maximize their soil moisture for sugar beet production. One potential idea is to purchase a "strip-till" machine that prepares a seed bed in one pass and applies fertilizer – essentially minimum tillage.

The Riffs first want to determine if the strip till machine, at a cost of \$25,000, will make them money on a per-acre basis. They know the machine will save time and trips through the fields (decreased tillage passes, applying fertilizer in one pass, and saving soil moisture), but they need to perform

a partial budget on the field operations to determine profitability on a per-acre basis.

The Riffs will use these figures to determine if their risk management planning is still adequate on a per-acre basis or if significant changes should be made. Once a partial budget is completed for their cropping decisions, they can move to enterprise or whole farm budgeting to more fully develop an adequate risk management plan.

In the next installment, we examine the effects of the Riffs' potential purchase by developing a partial budget.

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## Ensure lactating cows get sufficient phosphorus levels

Brandon Greet

Calving is about to begin for many Wyoming ranchers.

With cold, snow, sickness, dystocia, and all the other excitement of calving season, there is plenty to worry about; however, a rancher in Wyoming can never forget about nutrition. Nutrition of herd dams should never be put to the side, especially during calving season.

Cattle need plenty of feed to produce milk for their young, but sometimes hay and pasture just don't have everything a cow needs.

Phosphorus (P) is not always present in feed, but P is an important nutrient for cows – especially lactating cows. It affects bone strength, energy metabolism, feed efficiency, milk production, and breeding.

P is also becoming more important to the cattle industry because, while cows need enough P for everything just listed, P is being carefully examined as a pollutant. Excess P is excreted in the feces of cattle, and more and more people are looking at this possible source of pollution. Over-supplementation leads to excess phosphorus being released into the environment, and that's your money being passed into the environment as a pollutant.

### Most Important Nutrient Deficiency

According to the International Plant Nutrition Institute, P deficiency is the most widespread and

economically important nutrient deficiency affecting grazing livestock. Forages and soils oftentimes have inadequate amounts of P. Symptoms of P deficiency include decreased appetite, reduced rate of gain, reduced feed efficiency, decreased milk production, and unusual food cravings such as wood, hair, and soil.

Cattle can usually compensate for short-term deficiencies. They have the ability to pull phosphorus from tissues and bones (80 percent of P is stored in bones) when necessary. If deficiencies become long-term, the problem becomes more severe and skeletal weakness occurs.

### Many Factors Affect Absorption

Like everything having to do with cattle, P absorption is not simple. Absorption is affected by a number of factors, including P source, intestinal pH, age of the animal, and dietary levels of calcium, iron, aluminum, manganese, potassium, magnesium, and fat.

The simplest thing producers can do is ensuring adequate P is available to their cattle.

Think about what cows will need. Calcium (Ca) and P are important components of milk. Both need to be readily available for consumption. A 1,200-pound cow in the first three to four months of lactation making 10 pounds of milk/day requires P at about 0.22 percent of dry matter/day. That would be 0.8 ounces/day on a ra-



tion of 23 pounds dry matter/day. Keep the ratio of Ca:P between 2:1 and 1:1 for proper nutrient balance.

### Know Your Feed

Creating this type of ration requires knowledge of your feed. This is another reason to get feed tested. Rations that include high-quality feeds or concentrates are less likely to require high levels of P supplementation. A great way to supplement P levels is through trace mineral supplements. These vary largely, and you must find the supplement that fits your feeding program and your budget.

You aren't just trying to have

good lactating cows, but also cows that will rebreed in several months. P not only enhances calving rates and calf growth rates, it enhances reproductive performance – proper P has been shown to increase rebreeding efficiency. P-deficient cows have shown irregular estrus periods, infertility, and anestrus.

### Bulls Also Require Good Phosphorus Levels

Don't forget about bulls. You rely on herd sires for next year's calf crop. A 2,000-pound bull needs 0.21 percent P in a diet (just over 1 ounce/day of P in 31.3 pounds of dry matter/day) to

maintain or slightly increase body condition.

Focusing on the calves hitting the ground and making sure they are warm and eating is easy but don't forget about what goes into the cows so those calves grow properly and that there is a good calf crop next year.

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