

# Useful Tools To Develop Balanced Beef Cow Rations



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**T**he air is cool and crisp with decreasing daylight, which means winter is fast approaching. It is important for beef producers to know about what it will take to get their herd through the winter months especially since winter feed costs are the

single largest expense in a beef operation.

Without question, feed costs across the entire beef industry have increased substantially. Thus it is important know the nutritional quality and quantity of those feedstuffs that the cattle will be consuming.

Feed cost is the highest variable cost on most cow/calf operations. There are methods available to evaluate feedstuffs and create a "least-cost ration" for cows. However, only 12 percent of cow/calf producers analyze their forages for nutrient content, based on USDA survey data. One cannot estimate forage quality based on sight and smell. As a result, many U.S. beef cows are receiving either excess or too nutrients and/or a ration that is not least-cost.

There are several free ration balancing programs available to producers. One in particular from the University of Minnesota can be found at <http://www.extension.umn.edu/Beef/>. This Microsoft Excel-based software enables a producer to enter simple information about their cows (pregnancy status, body weight and condition, breed, etc.), along with forage analysis results (protein, energy, etc.).

This particular ration balancing spreadsheet has quite a large list of 'pre-loaded' feedstuffs with typical feed values to choose from, but you can add additional feedstuffs based on current analyses. The user develops a ration using feeds from the feedlist which are compared to cow requirements. Once the ration is balanced, you

will also be provided a proposed diet cost analysis. You can choose from several different commodities to develop a least cost ration.

Development and use of a simple ration enables animal requirements to be met while ensuring optimum performance. But, more importantly it can reduce feed costs by avoiding overfeeding (especially protein, which is costly).

Another Excel spreadsheet develop by the University of Arkansas compare prices of various feedstuffs based on the value of protein and energy content of soybean meal and corn. The spreadsheet can be found at <http://www.ara-griculture.org/livestock/beef/nutrition/spreadsheets/default.htm>. This spreadsheet can also help you decide whether a feedstuff is a bargain or just simply too expensive to feed to cattle.

With the cost of feedstuff this year, ration cost can be decreased by replacing high-priced feeds (usually alfalfa or good grass hay) with cheaper and lower quality forages (straw or corn stalks) and a small amount of protein supplement.

However there are several items to take into consideration when developing rations. Remember that once a cow begins lactating, her energy requirement will increase and a new ration will be needed. Also take into account if your cows are significantly larger or smaller than 1,200 lbs because they may need a different ration. Cows that should be gaining body weight and condition during late pregnancy will also need a different ration.

The drought of 2012 has definitely affected the price of all feedstuffs. Utilizing these programs will provide cow/calf producer with the opportunity to develop several different rations based on feedstuffs available locally and determine the least-cost ration with the ultimate goal of reducing harvested and purchased annual feed costs of production. Δ

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