



Big Horn County sugar beet growers look to manage production risk – Part I

By James Sedman and John Hewlett

Big Horn County farmers Ken and Rich Riff own Riff Brothers Farms that consists of 600 acres of dry beans, sugar beets, and barley (usually 200 acres of each). This spring, the Riffs are particularly worried about the risk with their sugar beet acres.

They have two main production concerns. First, the past fall and winter were extremely dry with mild temperatures. The Riffs are concerned the soil moisture is low and beets may require irrigation to germinate or that they may have to replant.

Second, input prices (including their technologically advanced seed) have never been higher, and they are committed to their beet acreage through membership in the local cooperative. The brothers are looking for some stability and revenue protection for their bottom line.

Crop Insurance Options

There are two main crop insurance options available to the Riffs for their sugar beet crop. Multi-peril and catastrophic coverage (CAT) are based on the Riffs' actual production history (APH). This covers against losses in yield from covered perils at a price set at the time of policy purchase. For the multi-peril insurance, the Riffs are able to insure from 50 to 85 percent of their APH yield at 55 to 100 percent of the crop price.

For the coming production year, the established price is \$51.30 per ton (an additional price of \$59.85/ton is also obtainable). Sugar beet multi-peril also has a replant provision available that may offer an indemnity payment when the stand loss is great enough the crop will not produce 90 percent of the final production guarantee, and it is practical to replant. For our purposes, assume the Riffs have an APH yield of 25 tons per acre.



CAT coverage protects against losses greater than 50 percent at 55 percent of the APH yield for a total cost of \$300 per year. An added benefit of utilizing a crop insurance program is that the Riffs will be qualified for disaster assistance if a substantial loss occurs and disaster payments are available.

Decision and Peril

After considering their options, the Riffs choose the maximum yield coverage available at 85 percent along with a 100-percent price election of \$51.30 per ton.

For more information

To learn more about actual production history-based, multi-peril insurance for sugar beets or other crops, consult a local crop insurance agent or visit the Risk Management Agency website at rma.usda.gov. For more information on this and other risk management topics on the Web, visit the Western Risk Management library at riskmgt.uwagec.org.

This equates to a total revenue guarantee of \$1,090.13 per acre (0.85 times 25 tons per acre times \$51.30 per ton).

The Riffs were right to be concerned about the coming dry production year. The early spring was dry and caused difficulty in getting the crop to emerge. The Riffs had to replant 100 of their 200 acres of beets.

In the next installment in this series, we will examine the effectiveness of the Riffs' insurance decision, compare it with CAT

coverage, and demonstrate how it would work with federal disaster programs.

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Investing in genetics

Use sound economics, consider benefits associated with improving herd genetics

By Bridger Feuz

Agricultural extension professionals and other agriculture industry professionals often extol the virtues of the "low-cost producer."

In most cases, being the low-cost producer does lead to an increase in profitability. However, two different data sets suggest there are areas high-profit producers actually spend more money on than low-profit producers. CattleFax presented data at the 2008 National Cattlemen's Beef Association convention, and information from Integrated Resource Management (IRM) also suggests that range and pasture improvement and genetics are areas successful, high-profit producers spend as much or more money on than other producers.

Does this mean all producers should increase spending on livestock genetics? Probably not, but it does mean producers should use sound economic principles and carefully consider the benefits associated with improved genetics.

Investing in Genetics

While investing in genetics offers producers an ability to improve their herds and potentially enhance profitability, it is not without risk. Bulls can injure themselves, die, or just chose not to perform their duties. Additionally, choosing the "right" bull can be difficult.

One of the best tools producers have to select the right bull is Expected Progeny Differences (EPDs). EPDs provide good information and are valuable in predicting a bull's future performance, but EPDs on young bulls have a relatively low accuracy, which again creates risk in the investment.

So, while data would show profitable producers tend to invest more on genetics than low-profit producers, how do producers know which bulls are right for them and how much can they afford to pay for a given bull?

While economics is important in this decision, choosing the right bull is somewhat subjective depending on the desired herd im-

provements. Producers who match their investments in genetics with their marketing programs, resources, and management plans certainly tend to be more successful.

How Much is a Bull Worth?

Since purchasing a bull is a risky venture, and since it can take more than one year to break-even on the investment, looking at the time value of money when considering how much you can afford to pay for each bull is important. Table 1 analyzes the amount of additional revenue per calf required to break-even on the additional investment per bull, given different interest rates or discount factors. Table 1 looks at three different additional investment levels – \$500, \$1,000, and \$1,500, and three different potential interest rates. Interest rates range from a conservative 5 percent to a credit card-like 18 percent.

Using Table 1

Bull A would cost a producer \$1,500. Bull B would cost a producer \$2,500. Bull B requires an additional investment of \$1,000. If the interest rate is 5 percent on the investment capital, that means bull B needs to generate \$220 more each year over five years at 25 calves per year than bull A to break-even on the investment.

Another way to look at it is each calf from bull B would need to be worth \$8.80 more than calves

Table 1. NPV Genetic Investment Example

Additional Investment	Discount Rate	Annual Revenue	Annual Revenue
		5 Year Break-even	Per Head @25 calves/year
\$500	5%	\$110.00	\$4.40
\$500	8%	\$116.00	\$4.64
\$500	18%	\$135.50	\$5.42
\$1,000	5%	\$220.00	\$8.80
\$1,000	8%	\$232.00	\$9.28
\$1,000	18%	\$271.00	\$10.84
\$1,500	5%	\$330.00	\$13.20
\$1,500	8%	\$348.00	\$13.92
\$1,500	18%	\$416.50	\$16.26

from bull A. If bull B is purchased on a credit card at 18 percent interest, bull B would need to generate \$271 more per year to break-even after five years or \$10.84 per calf.

Summary

Investing in proper genetics has proven successful for profitable producers. However, they invest wisely choosing bulls that fit within their marketing programs and mesh with their specific production environments.

Using tools such as the one in this article for a guideline when considering how much you can afford to invest in genetics can be

helpful. This article is taken from a bulletin. If interested in reading the full bulletin, which includes an additional analysis tool, visit www.cattlemarketanalysis.org and click on the File Down Loads link on the left-hand side

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