BARNYARDS & BACKYARDS

JANUARY 2014
UNIVERSITY OF WYOMING

University of Wyoming Extension | Profitable & Sustainable Agricultural Systems | RMA Risk Management Agency

Big Horn Basin farm uses new enterprise risk analyzer tool - I

By James Sedman and John Hewlett

Most of today's farms and ranches involve more than one enterprise in their production mix. Production risk spread over several enterprises often contributes to their financial successes.

Enterprise risk analysis – estimating net returns for an enterprise and the variability in those returns (risk) – is an often-neglected but necessary part of developing overall risk management strategy.

Enterprise analysis helps producers obtain an accurate picture of enterprise profitability by evaluating enterprise net revenue and effect on the entire operation. Such analysis helps identify not only the range of possible farm returns with associated probabilities but also to develop contingency plans should returns decline below reasonable levels.

Accurate analysis can help managers evaluate how to properly allocate resources, determine break-evens, cut costs, and manage risks.

Table 1. Current Farm Enterprises, Projected Prices, and Yields for EF Farm

Stochastic Elements	Estimate	Yield per Enterprise Unit	Units (bu/ton/lbs)	Price per Unit	Expected Revenue per Enterprise Unit *(most likely)*
Malting Barley	*Minimum*	32	bu	$ 1.75	$ 311.30
	Most Likely	110		$ 2.83	
	Maximum	140		$ 4.00	
Sugar Beets	*Minimum*	14	ton	$ 32.00	$ 875.38
	Most Likely	22		$ 39.79	
	Maximum	26		$ 43.00	
Grain Corn	*Minimum*	10	bu	$ 2.00	$ 344.40
	Most Likely	140		$ 2.46	
	Maximum	180		$ 6.00	
Silage Corn	*Minimum*	18	ton	$ 13.00	$ 460.00
	Most Likely	23		$ 20.00	
	Maximum	27		$ 26.00	
Alfalfa (est+growing)	*Minimum*	2.5	ton	$ 55.00	$ 270.41
	Most Likely	3.75		$ 72.11	
	Maximum	5		$ 150.00	

Enterprise Risk Analyzer Tool from RightRisk.org

The team of professionals from RightRisk has developed another tool for evaluating risk management strategies called the enterprise risk analyzer (ERA).

This spreadsheet-based tool allows users to enter income and expense information for an entire farm or ranch and then allocate those values over various enterprise activities for the operation. This includes cash expenses, such as feed, seed, and fertilizer, and non-cash (and therefore harder to estimate) expenses, such as depreciation, taxes, fuel, and interest.

The ERA tool evaluates farm/ranch financial performance once the necessary data has been entered. Analysis includes whole farm/ranch net return, enterprise net return, break-even prices, and break-even yields. Comparing enterprise performance and determining how much each enterprise contributes to whole-farm/ranch profitability is then possible.

The ERA tool also provides risk estimates based on user projections for commodity prices and yields. The ERA tool estimates probabilities for earning a given level of net income, a break-even price, or a given break-even yield.

Big Horn Basin Farm Owners Seek Answers

Owners of the EF Farm in Big Horn County decided to use the ERA tool to assess their operation and evaluate the actions they might take in adjusting their crop mix.

The farm raises sugar beets, malt barley, corn, and alfalfa over 835 acres. Listed in its example (left, and at RightRisk.org) are the farm's total acreages for each crop along with their minimum, most likely, and maximum projections for commodity yields and prices.

In the next installments, we will follow the EF Farm owners as they organize their financial information using the ERA tool. We will track how income and expenses are allocated over the range of crop enterprises, determine the most and least profitable enterprises, decide where improvements or changes could be made, and examine the effect on various short- and long-term break-even values.

James Sedman *is a consultant to the Department of Agricultural and Applied Economics in the University of Wyoming College of Agriculture and Natural Resources, and* **John Hewlett** *is a farm and ranch management specialist in the department. Hewlett may be reached at (307) 766-2166 or hewlett@uwyo.edu.*

For more information

The enterprise risk analyzer tool is available at RightRisk.org. Under the Resources tab, click Risk Mgt Tools. The tool includes a user guide in addition to an example farm and ranch already loaded. RightRisk.org has numerous other resources and producer profiles to assist in risk management planning needs.

Snake oil – Have you bought some lately?

By Sandra Frost and John Downer

At one time or another we have all been desperate for a quick, easy solution to a problem.

Farmers, ranchers, and gardeners are exposed to thousands of advertising messages that promise to solve plant, soil, and livestock problems.

Snake oil products are always out there waiting for us to relax our guard.

In the 19th century, salesmen offered patented cure-all products that claimed to cure disease, ailments, or problems. Snake oil products make efficacy claims not backed by scientific research, and the claims may seem quite different from actual results. Claims may use a scientific principle and a great deal of jargon to promote the product. The claim may also include a "new active ingredient" not explained or named.

Keep several things in mind. In-house or third party research results should be partnered with university trials and research results for credible product evaluation. Products may perform differently on different soil types and in different climate zones.

Most products on the market do not require any kind of scientific efficacy testing. Fertilizers, growth stimulators, hormones, compost teas, and vitamins do not require testing. Pesticides do because they are highly regulated by the Environmental Protection Agency.

Furthermore, comparison of treatments may not show differences due to the cropping year conditions. For example, any soil amendment or fertilizer product, effective or not, may be consumed by plants, or leached away during the cropping season and have reduced, late-season effects. Re-application may be necessary later in the crop season.

What can a person do?

Find an expert. A grower who wants to try a fertilizer or soil amendment could talk to a scientist at one of University of Wyoming's research stations and ask for peer-reviewed, independent research that establishes efficacy of the product.

Do your own trial. A grower may want to run his own demonstration trial on a small scale the first time he uses the product. Use the product on eight or 12 rows immediately adjacent to untreated rows for easy comparison later in the season. Follow label directions exactly. At harvest time, don't depend upon visual assessment – take time to measure yields from the same sample size per treatment.

At the end of the day, the message is buyer beware. Gardeners and producers must be informed enough to make a decision that will protect their land enterprises and their pocketbooks.

Sandra Frost *is a University of Wyoming Extension educator specializing in crops and based in Park County. She can be reached at (307) 754-8836 or at sfrost1@uwyo.edu.* **Jim Downer** *is with University of California Cooperative Extension.*