

# BARNYARDS & BACKYARDS

## The Risk Scenario Planning Course: Available online from RightRisk.org

Accounting for and managing risk and uncertainty in production agriculture has many facets.

Every level of production and planning requires at least some risk management.

Managers properly recognizing and addressing inherent risks is important, not just in the production side of the business, but also in the many planning and budgeting aspects.

### The RSP Course

The Risk Scenario Planning (RSP) course from RightRisk.org first helps producers identify risk and uncertainty in their operations and then how to use the RSP tool to properly manage risk during budgeting.

The course is divided into modules and provides several case studies showing how the RSP tool can be used in different situations.

The RSP course gives an overview of the different types of risk in production agriculture, including: financial, production, human, institutional, and marketing/price risks. One important point to remember is risk doesn't necessarily imply a negative outcome, but an uncertain one that could be positive, negative, or neutral.

Reducing the chances of negative outcomes and increasing the chances for positive outcomes is one possible goal. Another common goal is to reduce the consequences of bad or undesirable outcomes when such an approach is financially feasible.

In the module addressing future expectations, the course covers the three main types of risk preference: risk seeking, risk neutral, and risk averse, as well as describing the many different risk biases that influence our outlooks on the future.

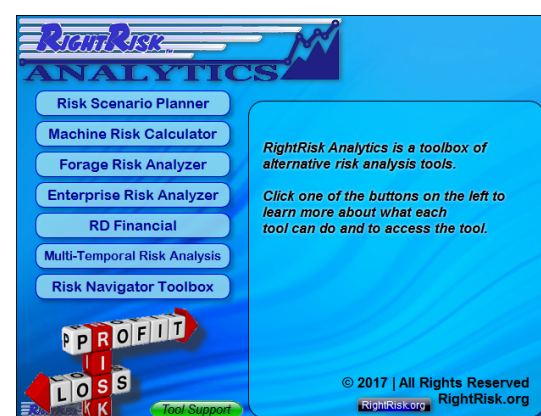
The Risk Management Framework module discusses how to foster an appropriate risk management culture within the business. Effective risk management should be a competitive advantage, proactive, a priority, and an integral part of an organization.

The course highlights and goes into much greater depth for each level of the risk management framework and describes how to implement such an approach in an agricultural operation.

### RSP Tool Overview

The last module highlights the RSP tool. Partial budgeting, in some form or another, is used by most crop and livestock producers to examine one or more potential changes to their current business strategies. This change could be anything from a change in cropping practice, keeping extra breeding livestock, or a capital purchase.

When assembling these partial budgets, many of the variables are estimated with imperfect knowledge; the inherent risk in the variables are rarely accounted for. Problems can arise when these estimates (for such items as expected prices or yields) are used as if they were 100-percent accurate forecasts. This approach can, and often does, lead to flawed decisions. The resulting budget estimates are really no better than a "best guess" when the risk and associated variability has not been included. Including variability in the budgeting process is a much better approach.

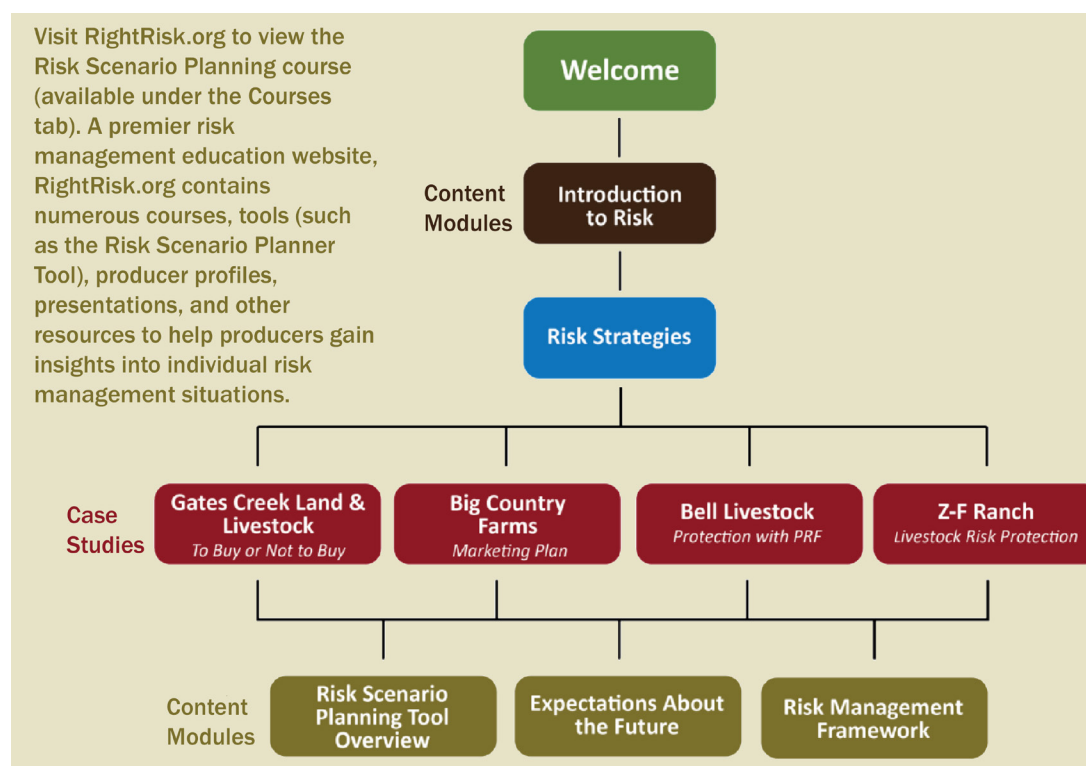


### RightRisk Analytics

The RightRisk Analytics Toolbox contains several risk analysis tools covering a wide range of agricultural risk management areas and issues including budgeting, forage leasing, machinery costs, and whole farm budgeting.

To view or download the toolbox:

- Logon to RightRisk.org
- Under the Resources tab, select Risk Management Tools.



Visit RightRisk.org to view the Risk Scenario Planning course (available under the Courses tab). A premier risk management education website, RightRisk.org contains numerous courses, tools (such as the Risk Scenario Planner Tool), producer profiles, presentations, and other resources to help producers gain insights into individual risk management situations.

The RSP tool can help a manager include and quantify the risks associated with a proposed management change or decision. The RSP tool assigns a range of probable outcomes associated with a management change for certain variables and can help managers account for the variability and, ultimately, make more informed production decisions.

This unique feature allows RSP users to enter a range (minimum, maximum, and most likely) estimates for up to two variables and then generate a probability distribution showing the range of potential outcomes.

The four case studies included in the RSP course describe one or more management decisions for different crop and livestock operations where the RSP tool is used to provide a clearer understanding of the tradeoffs between the choices available.

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## AG CALENDAR

### Fremont County Farm and Ranch Days

Farm and Ranch Days are Wednesday-Thursday, Feb. 7-8, in Riverton at the Armory Building on the fairgrounds.

### WESTI Ag Days

WESTI Ag Days is Wednesday-Thursday, Feb. 14-15, in Worland. This free event brings together agricultural producers and local businesses for lunch and educational programs.

### Pesticide application training in Big Horn Basin

For Cody, Greybull, Lovell, and Powell session information, contact University of Wyoming Extension educator Jeremiah Vardiman at (307) 527-8836; for

Riverton, educator Chance Marshall at (307) 682-7281; for Worland, educator Caitlin Youngquist at (307) 347-3431.

- Lovell – Tuesday, Jan. 30, 8 a.m.-noon, Lovell Annex
- Cody – Wednesday, Jan. 31, 1-5 p.m., Grizzly Room, Park County Library
- Riverton – Thursday, Feb. 8, 9 a.m.-4 p.m. (includes lunch) at Farm and Ranch Days
- Greybull – Monday, Feb. 12, 1-5 p.m., Big Horn County Weed and Pest Building
- Worland – Thursday, Feb. 15, 1-5 p.m. at WESTI Ag Days
- Powell – Tuesday, Feb. 20, 8 a.m.-noon, Bicentennial Hall, Park County Fairgrounds,
- Worland – Wednesday, Feb. 21, 8:30-noon at Washakie County Extension Office



## Evaluate alternative feeds during drought

Beef producers on western rangelands face times when forages grazed or fed are poor quality or in short supply.

Whether due to drought, budget challenges, or insufficient amounts of stored feed, these episodes challenge the goals and stability of western agricultural operations. When feed quality or quantity issues threaten the ability to maintain herd numbers and the ability to meet economic needs, many producers get creative by evaluating alternative forages to get animals through "dry" spells.

Several realities cannot be ignored when considering alternative forages.

- Research shows cattle need to be on an increasing plane of nutrition during their last trimesters of gestation so they calve successfully, are in suitable condition to rebreed in a timely matter, and their calves are programmed before birth to be able to process feed very effectively.
- Cattle and other ruminants cope with low quality feeds by slowing their "passage rate" in an effort to squeeze more nutrients out of what little of poor feed is available.
- A cow's ruminant system is dependent on the structural fiber intake and the balance of protein, energy, and other nutrients.

Testing alternative feed for crude protein is not sufficient to show what is provided. All nutrients and other factors must be closely evaluated in times of nutritional challenge. This evaluation must include protein, fiber, energy, and macro and micronutrients.

Many producers simply purchase inexpensive feeds such as straw, sorghum-sudan hybrids, or corn by-products as roughage and then provide more supplement sources than during normal periods.

### Proteins Provide the Energy

Cattle must have sources of digestible protein (DIP) and undigestible protein (UIP) and energy for the bacteria in their ruminant system to effectively break down roughages. If the bacteria are not effectively fed, the roughage and fiber will not be broken down and used effectively.

Combined, low quality forages and insufficient nutrients reduce a cow's metabolism and performance to survival levels and threaten and affect the cow and any unborn fetus.

A cow's condition reflects the status of its nutritional state eventually leading to the use of body condition scoring (BCS) as a tool to assess nutritional adequacy and processing. But these changes are after the fact, and providing suitable nutrition before observing a change in body condition is vital.

### An Example

Let's look at an example of alternative feed use while considering the nutritional needs of a cow



based on the Nutrient Requirements of Cattle (NRC) guidelines and a wide body of herd-based research in several states.

Let's use a 1,200-pound cow with a moderate milk production level and is expected to drop a 90-pound calf. Her intake in October is mostly range grasses with about 7.3 percent protein, is about 54 percent digestibility, and provides 85 percent of her crude protein (CP) since supplementation has not started because there is no snow cover.

She is consuming 26 pounds of this forage every day. If she calves in May, she will now need 25.1 percent more energy, 3 pounds of protein (688 grams of metabolizable protein), 29 grams of calcium, and 20 grams of phosphorus every day. This range grass only provides limited energy, 1.8 pounds of protein, and substandard levels of calcium and phosphorus. Most producers use range supplements to meet these shortfalls while using regular range grass and stored hay.

But when alternatives must be fed, the shortfalls become pronounced and often cannot be rectified with normal supplementation. An example would be feeding wheat straw, which is often cheaper but still provides suitable dry matter needs. This feed has less than 3 percent CP and less energy than range grass on an intake basis. This leaves the cow with a shortfall 2.22 pounds of protein and 30 percent of her protein needs. Often, the cow slows her metabolism to cope, and her body condition and gestation security drop dramatically.

Since live calves on the ground are the actual engine of profitability, most producers provide additional supplement during tough times with a focus on protein. But cows can only eat limited amounts of supplement, especially if combined with salt and mineral, which many are.

A number of creative ideas were evaluated with ration balancing software in reviewing work with over 60 ranches facing feed challenges. In most cases, meeting protein needs with supplements was easy, but most rations (54 of 60) were dramatically short of energy for maintenance, growth, and gestation. Often, purchasing high-energy supplements is daunting because of cost and availability.

### The Important Points

The take away message here is when faced with periods of feed challenge, a producer should:

- Find available feedstuffs and get a test sample for analysis.
- Test these alternative feeds and your range or existing forage.
- Work with an extension professional or nutrient consultant to develop and evaluate several ration options.
- Always watch alternative feeds for risks such as prussic acid, nitrates, fungus, rusts, and other issues.
- Decide on the combination that fits your operation and is economically feasible.

Extension educators have access to references and ration software that can help nail down viable options, whether evaluating wheat, canex, corn stover, or other options during challenging times. Don't let your cows or operation slow just due to a lack of normal feeds.

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