BARNYARDS & BACKYARDS

December 2008

University of Wyoming

UW Cooperative Extension Service | Profitable & Sustainable Agricultural Systems | RMA Risk Management Agency

RMA Premium Calculator: An online tool for producers

By James Sedman and John Hewlett

The 2008 production year could be described as wild, unpredictable, expensive for some, and lucrative for others.

The large price swings that occurred in all commodities this year coupled with huge increases in input costs make effective risk management more important than ever.

Lenders will want to know producers have their risks adequately covered and have an estimate of the cost of that coverage before discussing loans for next year.

A tool is available online from the U.S. Department of Agriculture (USDA) Risk Management Agency (RMA) to help estimate premiums for various crop insurance products. The Premium Calculator available at www.rma.usda.gov/tools/premcalc.html can calculate the premium for any insurance available under the federal crop insurance program.

The Premium Calculator

Volatile commodity markets coupled with the financial market meltdown will help make agricultural lenders more attuned to the risk management plans of their borrowers. The Premium Calculator can provide a quick and easy way for producers to determine which insurance programs will work for a particular operation and help estimate premium costs for any insurance policy, including crop or livestock programs. This should make budgeting insurance costs easier in addition to providing estimates for lenders.

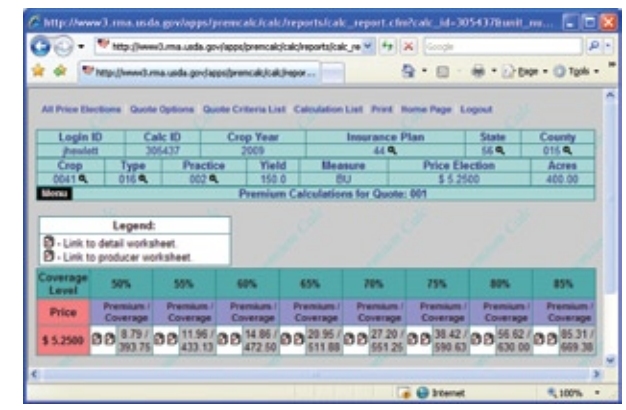
How Calculator Works

Begin by logging into the RMA Web site at www.rma.usda.gov. Click on the Tools and Calculators link at the bottom left, then select the Premium Calculator link from the list of tools. Next, click the Premium Calculation Online Tool link. Click on the New users click here link to setup an online account to begin using the tool (the calculator link is free – the account is simply so a user can save multiple policy quotes and send them to an e-mail address).

As an example to show how this calculator would work for a crop producer, consider the following corn producer in southeast Wyoming.

The producer insures 400 acres of corn for grain under Crop Revenue Coverage (CRC). Once online at the premium calculator, the producer selects new calculation from the menu and selects the crop year, state, and county. CRC coverage is selected for coverage at a price election of $5.25 per bushel. Producers should input estimated yield and acreage, then input the numbers from their crop insurance representative for the RMA low and high price factors for the crop year (here we will use 0.969/0.969). In this case, the yield will be 150 bushels/acre, 135 bushels/acre for the rate yield, and 400 acres total with a 100-percent share.

The producer then clicks "process quotes" from the bottom of the page. Any extra options such as prevented planting are shown as choices before the final quote is given. Choosing basic coverage provides the results as table of premium/coverage estimates by coverage level (in this case from 50 to 85 percent), on a per-acre cost for the premium and total revenue coverage per acre. For our example, values range from 50-percent coverage with a premium of $8.79 per acre and $393.75 coverage, to 85-percent coverage with a premium of $85.31 per acre with $669.38 coverage.



For more information on this and other insurance tools and calculators for crop or livestock policies, visit the RMA's Web site at www.rma.usda.gov, visit the Western Risk Management Library at agecon.uwyo.edu/RiskMgt, or contact a crop insurance agent. Agents are able to help develop a crop insurance plan for individual needs.

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University of Wyoming Cooperative Extension Service offers programs

The University of Wyoming Cooperative Extension Service (UW CES) is hosting the following agricultural programs this winter. For more details about these or any other programs in your area, contact a local UW CES office.

Unit Cost of Production – January 26-30 in Laramie. For more information, contact UW CES Educator Kellie Chichester-Jameson at kelliec@uwyo.edu or (307) 721-2571.

Wyoming Master Cattleman – For information on the Wyoming Master Cattleman program nearest you, contact UW CES Educator Bridger Feuz at brfeuz@uintacounty.com or (307) 783-0570.

WESTI AG Days – Wyoming Extension's Strategically and Technologically Informative Ag Days will be in Worland Feb. 3-4 at the Worland Community Center at 1200 Culbertson Ave. Contact UW CES Educator Jim Gill at (307) 347-3431 or jrgill@uwyo.edu for more information.

Farm and Ranch Days – Feb. 5-6 in Riverton at the Armory. Contact UW CES Educator Ron Cunningham at (307) 332-1044 or ronc@uwyo.edu for more information.

Rural Living in Wyoming – Several small-acreage workshops will be held throughout the state from December through March. Contact a local extension educator for more information or state small-acreage coordinator Jenny Jones at (307) 745-3698 or js-jones@uwyo.edu.

Proper windbreak design can help corral blowing snow

By Gene Gade

You're probably not calling that cold white stuff by romantic names like Mariah when it whips across your property at warp speed on a horizontal trajectory, painfully blasting exposed skin as it howls toward Nebraska or the Dakotas.

If it slows down a bit, blowing snow may seem to diabolically form drifts that are a nuisance or even a threat to life.

If snow keeps tumbling through this semiarid landscape, the flakes will "sublimate," returning as vapor to the atmosphere without entering the useful liquid state…as if no precipitation had occurred. No wonder folks usually think of blowing snow as a curse in Wyoming.

The good news is blowing snow can be managed to a degree, reducing its negative impacts and even creating benefits. Effectively managing blowing snow requires knowledge. It entails a method of reducing the velocity of the wind and providing a desirable place for the snow to settle and accumulate. Almost any kind of barrier or surface roughness, from stubble in a grainfield, to shrubs or grass on rangeland, to a planted shelterbelt of trees and shrubs, to a board fence or building, can slow the wind, reduce its energy, and cause it to drop its load of snow where desired.

Obviously, some barriers are more effective than others, and there are some science-based do's and don'ts.

If the direction of the wind is consistent and the shape and porosity of the barrier is known, it's possible to predict fairly precisely how much the wind velocity will be reduced as well as the location and geometry of the snow drift it causes. For example, if you build a barrier perpendicular to the wind that is half solid and half open space (i.e. 50 percent porosity), there will likely be a small drift (no more than half the height of the barrier) upwind of the barrier. The much larger drift will form downwind from the barrier. Both drifts will look like classical airplane wings in cross-section, but the thick, leading edge of both "wings" will be toward the fence with the trailing edge tapering away from it.

The main drift will start a few feet behind the barrier, but it might actually build higher than the fence (actually 1.2 times the height is physically possible) and may taper off for a distance of 30 times the height of the barrier downwind. So, a properly placed 8-foot, 50-percent porosity snow fence could create a significantly wide, up to 4-foot high snow drift upwind and a main drift with a maximum height of 9 ½ feet near the fence and tapering off for 240 feet downwind. A drift of that size can produce many thousands of gallons of water for plants and animals when it melts. In one study by the U.S. Forest Service in southeast Wyoming, a 12-foot tall, 2,600-foot-long snow fence increased the water yield of a small drainage by 22.9 acre-feet…about 7.5 million gallons!

The influence of tree-shrub windbreaks is not as precisely predictable, but the same physical laws apply. For example, research has shown that a shelterbelt can reduce a 30 mph wind to 8 or 10 mph immediately in its lee (downwind) and will cause at least some reduction in wind velocity for as much as 700 feet downwind.

There are lots of variables to consider and some precautions to take when attempting to manage wind and snow. For example, depending on the goals, a wind/snow barrier may be either solid or porous. It can be perpendicular to the wind or pointed into it. It can be low and portable or temporary, or it can be high, stationary, and permanent.

A common mistake is to place a barrier too close to the structure or road it is supposed to protect, possibly creating a large drift precisely where it is not wanted. If wind direction is extremely variable, the effectiveness of barriers may also be less predictable.

The application of wind/snow management in Wyoming can be very important. Buildings, livestock, and wildlife can be protected from the extremes of wind chill, saving energy, feed, and perhaps even lives. Snow drifts can be located where they yield valuable water for desirable plants and prevented from accumulating where they pose danger or are costly and inconvenient to remove (ex. driveways). Goals should be clear, and technical assistance should be sought before committing to the investment in fences or shelterbelts. If these windbreaks are properly planned and installed, the curse of Wyoming's blowing snow can be reduced and even turned into a valuable resource.

For information about planning or installing a windbreak, contact a local University of Wyoming Cooperative Extension Service (UW CES) office (http://ces.uwyo.edu/Counties.asp), local Natural Resources Conservation Service office (http://www.wy.nrcs.usda.gov/), or local Wyoming conservation district office (http://www.conservewy.com/).

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