



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

Carbon County ranch seeks to cover risk in retained ownership – Part IV

By James Sedman and
John Hewlett

We examined in previous articles various risk management options for Carbon County ranchers Norm and Belinda Bell. They are seeking the best way to protect against falling prices for 155 head of retained ownership steers.

We looked at using Livestock Risk Protection (LRP) and Livestock Gross Margin (LGM) insurance. We now consider two other alternatives – prepaying feed and using futures/options markets – and compare them with LRP and LGM to show how the Bells made their final decision.

Prepaying Feed

The feedlot to which the Bells usually send their steers offered them the option of prepaying feed – essentially locking in the corn price for the feeding period.

While this option does not address possible cattle price declines, it does address feed price variability.

The main disadvantage is the large up-front cost. In this case, assume the Bells will prepay for 52 bushels per head (155 head total). This is 8,060 total bushels at a cost of \$6 per bushel resulting in a total cost of \$48,360. The current corn price is \$6.25/bushel, which saves the Bells \$0.25/bushel (\$2,015 total).

Futures/Options Markets

The Bells have also considered using futures/options markets. The main problem the Bells see with using straight futures (hedging) contracts is the large up-front cost and the inherent variability of the markets.

For example, a June fat-cattle contract is trading at \$115/cwt. Covering the Bells' cattle on feed would require four, 50,000-pound contracts. Selling these contracts (\$230,000 total) would require a 20-percent, margin-money deposit of \$46,000.

Ideally, the price would have declined by the time they buy back the contract in June, and they will have made money.

The risk inherent in hedging is that the market could go the other way and cost them substantial margin-money to keep the contract.

The options market is one way to minimize that margin risk because an option contract gives the producer the option of exercising a futures contract at a certain price for a premium paid up front.

While there are margin requirements, they are much less than for straight hedging because the margins are paid on the value of the options themselves and not on total contract value.

Assume that the June put option for fat cattle is trading at \$115/cwt. with a premium of \$12.75/cwt.

Table 1. Comparison of Bell Livestock Risk Management Options

Strategy	Per cwt. cost/premium cost	Total premium/strategy cost	Downside cattle price risk protection	Feed cost protection
No risk management	\$0.00	\$0	No	No
LRP contract	\$5.64	\$11,365	Yes	No
LGM contract	\$4.35	\$7,761	Yes	Yes
Prepay feed	\$24.96	\$48,360	No	Yes
Hedging/futures	\$23.74	\$46,000	Yes	No
Options	\$12.75	\$25,500	Yes	No

For 2,000 cwt. (four contracts), this would cost the Bells \$25,500.

If fat cattle prices fall below \$115/cwt. in June, the Bells would exercise the option and use the difference to offset the cash losses.

To simplify things, our analysis omits brokerage and other costs that should also be considered. Further, we do not consider the potential for the Bells to use futures or options to manage feed cost risk, which would further increase their up-front outlay.

Strategy Comparison

The results of the various strategies are in the Table 1. Note that, while the Prepay Feed option is listed as a cost, this is just for up-front cost comparison. Ideally, prepaying feed should save the Bells money over the feeding period.

After looking at their options, the Bells decide to use

LGM insurance. First, it provides coverage against both declines in the cattle price and increases in the cost of feed. Second, the up-front premium cost is reasonable considering the cost of the other options (such as using futures/options). Third, there is no potential for cost increases (such as margin requirements) if market prices rise unexpectedly.

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:

Visit a local crop insurance agent to learn about Livestock Gross Margin insurance and how it may fit your risk management plan. For more information on livestock risk management and other risk management topics on the Web, visit the Western Risk Management library at <http://riskmgt.uwagcc.org/>

Insects can invade but diseases pose bigger threat to trees

By Scott Hininger

Will some alien bug invade Wyoming and wipe out our ash trees?

There is concern about foreign insects moving into states and decimating tree species. We saw this with Dutch elm disease and the beetles and diseases attacking our national forests. More recently, there is the discussion about the emerald ash borer.

The emerald ash borer is a wood-boring beetle from Asia that has become established in parts of the upper Midwest. They particularly attack the green ash, which has been planted in Wyoming for many years. These insects making it to Wyoming on their own is unlikely, as there is no contiguous ash forest across the plains.

How an Invasion could Happen

So, how will they get here?

Most likely they will be transported here by either nursery stock or firewood.

What to look for?

Emerald ash borers are a bul-



Photo: David Cappaert, Michigan State University, Bugwood.org



Photo: Marianne Prue, Ohio Department of Natural Resources - Division of Forestry, Bugwood.org

let-form typical of the flatheaded borer family. The two main distinguishing features are the uniform, metallic, bright green color and the "D" shaped exit hole left in a tree. This borer is similar to other borers in that the larval stage feeds under the bark with meandering tunnels, which will eventually girdle and kill the tree.

There are already borers present that attack ash in Wyoming, such as the lilac ash borer. These borers expel sawdust through round exit holes. The adult resembles a paper wasp and, when

exiting the hole, leaves its pupal skin.

There is also the redheaded ash borer or banded ash borer. This is a member of the longhorned beetle family, although their antenna are not as long as many. They also leave a round exit hole. Then there is the ash bark beetle, which is a much smaller beetle similar to the beetles that attack pine trees. The holes these little beetles make are very small, and the galleries the larvae make under the bark resemble those of the beetles killing pine trees.

Colorado Conducts Surveys

These non-native insects and diseases are continuing to be introduced into the United States, but how do they get to Wyoming? Colorado residents looked at this question and conducted a statewide survey of nursery stock and firewood movement into the state.

There appears to be a very low risk of the emerald ash borer moving into the West on its own. The survey showed 40 percent of retail firewood sales in Colorado were from out of state. A survey of two national parks in Colorado showed nine percent of the campers from out of state brought their own firewood. Hunters and fishermen from out of state were not included in the survey.

There is a danger of moving borers with firewood or other wood products, but it is a lower risk.

Diseases Pose Bigger Threats

The real problem is the movement of diseases in firewood, wood products, and nursery stock. These pathogens remain viable for several years. Most insects can be sprayed, but most of these diseases are not treatable. The highest threat is from movement of nursery stock into the state.

Treat firewood by wrapping or covering it with clear plastic and leaving it in the sun for several months in the summer; this eliminates most insects and some diseases. Inspect nursery stock for disease or insect problems. Don't buy if suspect. Most nurseries have good-quality plants and knowledgeable staff members to recognize these pests. Most box stores do not have this expertise.

Scott Hininger is a University of Wyoming Extension educator serving Campbell, Crook, Johnson, Sheridan, and Weston counties. He can be reached at (307) 674-2980 or at shininger@sheridancounty.com