



Dry bean growers use multi-peril crop insurance - Part III

By James Sedman and John Hewlett

Previous articles have focused on how the Riff Brothers utilized multi-peril crop insurance (MPCI) in a risk management strategy for their Big Horn County dry bean crop.

The brothers looked at other options including no insurance and minimal insurance in the form of catastrophic coverage. Purchasing MPCI turned out in their advantage. They suffered several severe weather events in a short time frame, significantly limiting their yields on 120 acres of pintos and 120 acres of great northern beans.

The specifics and results of their coverage are shown in Table 1 (below).

By using MPCI insurance, the Riffs also qualified for additional federal disaster assistance in the form of the Supplemental Revenue Assistance Payments Program (SURE) payments.

SURE Program Overview

SURE was developed to eliminate the need for ad hoc federal disaster assistance programs. As with all USDA disaster aid programs, only producers with an adjusted gross income of \$500,000 or less are eligible; total payments are capped at \$100,000.

Participation requires enroll-

ment in federally backed crop insurance or the Non-insured Crop Disaster Assistance Program (NAP) for all economically significant crops, defined as contributing at least 5 percent of total farm revenue.

The revenue guarantee defined in the crop policy forms the basis for the SURE guarantee that cannot exceed 90 percent of a farm's total expected revenue or 115 percent of the crop insurance guarantee, whichever is lower.

A SURE payment is triggered when a producer in a declared disaster county experiences a 10 percent or higher production loss or a 50 percent or higher loss due to a natural disaster in a non-declared county.

The payment will be 60 percent of the difference of the SURE guarantee and the total farm revenue for the year. Under SURE, total farm revenue includes all crop values, crop insurance and NAP payments, other disaster program payments, 15 percent of direct payments, and all farm program payments.

SURE Calculation

Because the Riffs experienced a yield loss in excess of 50 percent of their APH, they qualify for SURE.

For purposes of our analysis, we will assume only revenue from the beans and no other crops. We also assume that 15 percent of their direct FSA payments equal

\$750. The total SURE guarantee is determined by the crop insurance guarantee (75-percent coverage) for both the pintos and northrens times 115 percent. Total expected farm revenue is the crop insurance guarantee at 100-percent coverage times the established price, minus any deductions for prevented planting.

Actual revenue is calculated using the national average price times the actual yield. Crop insurance indemnity payments minus the premium costs, 15 percent of direct payments, and other government payments are added to result in total farm revenue of \$113,130. The SURE payment is determined using the smaller of 90 percent of the total expected revenue or the

For More Information

Visit your local crop insurance agent or the RMA's website at www.rma.usda.gov for more information on crop insurance plans such as multi-peril crop insurance (MPCI), how they may work with your operation, and how they qualify an operation for disaster assistance such as SURE. For more information on this and other risk management topics on the Web, visit the Western Risk Management Library online at agecon.uwyo.edu/riskmgt.

SURE guarantee; in this case, it is the SURE guarantee of \$134,757. Total farm revenue is subtracted, resulting in \$21,627; 60 percent of this is the resulting SURE payment or \$12,976.20. The calculation process is shown in Table 2.

Not only did the Riff brothers cover a substantial amount of production risk by purchasing MPCI insurance, they also qualified to receive further assistance totaling \$54.07 per acre through the SURE

disaster assistance program. Keep in mind the level of SURE assistance depends in part on the level of insurance coverage purchased.

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Table 2. Dry Bean SURE Calculation

Pinto beans:		Northern Beans:	
Crop insurance guarantee/acre	\$ 472.50	Crop insurance guarantee/acre	\$ 504.00
Total crop ins. guarantee	\$ 56,700.00	Total crop ins. guarantee	\$ 60,480.00
SURE guarantee (115% x above)	\$ 65,205.00	SURE guarantee (115% x above)	\$ 69,552.00
Expected revenue	\$ 75,600.00	Expected revenue	\$ 80,640.00
Harvested acres	120	Harvested acres	120
Yield	450	Actual yield	850
National avg. price	\$ 0.30	National avg. price	\$ 0.32
Crop revenue	\$ 16,200.00	Crop revenue	\$ 32,640.00
Indemnity (\$337.50/ac.)	\$ 40,500.00	Indemnity (\$232.00/ac)	\$ 27,840.00
(-) Insurance premium	\$ 2,400.00	(-) Insurance premium	\$ 2,400.00
subtotal	\$ 54,300.00	subtotal	\$ 58,080.00
15% Direct payments	\$ 750.00		
Other government payments	0		
Total farm revenue	\$ 113,130.00		
90% Revenue cap	\$ 140,616.00		
Lesser of 90% revenue cap or Total SURE guarantee			
Total SURE guarantee	\$ 134,757.00		
SURE guar. less total farm rev.	\$ 21,627.00		
SURE payment (60%)	\$ 12,976.20		

Table 1. Riff Brothers Dry Bean Indemnity Calculation

Crop	Actual yield	APH yield	Yield guarantee	Coverage level	Premium		
					Price	Indemnity	(\$/acre)
Northern	850	2100	1575	0.75	\$0.32	\$232.00	\$20.00
Pinto	450	2100	1575	0.75	\$0.30	\$337.50	\$20.00

Making sense of carcass ultrasound information in sheep

By Whit Stewart

Record slaughter lamb prices signal a great time for sheep producers to improve their flocks' genetics.

Lamb represents 85 percent of gross income, and wool represents approximately 15 percent of the gross income on typical operations. Understanding that wool is an important part of the product, I will focus on using carcass ultrasound technology as a tool for genetic selection.

Without slaughter of the animal, loin-eye area (LEA) is the best measurement of carcass merit; that is why we have seen LEA measurements in ram sales in recent years. Recent research has determined that LEA is the best quantitative measure of overall carcass merit. In fact, a 2008 study determined that a 0.8-square inch increase in LEA will lead to a 1-percent increase in dressing percentage or approximately a \$4.06 increase in gross carcass value.

Heritable Traits

Carcass traits in sheep are highly heritable. For example, heritability of rib-eye area is 35 percent, fat thickness is 30 percent, carcass weight is 40 percent, and weight of trimmed retail cuts is 45 percent.

Compare these heritable traits to other traits we strive to select for, such as ewe fertility – 5 percent, number of lambs born – 10 percent, 60-day weight – 10 percent, and 120-day weight – 20 percent, and it is easy to see improvement can be made with moderate effort. A balanced approach toward ram selection that includes LEA information can rapidly yield carcass-related improvements.

How do you get started? Collecting LEA data requires a 5- by 12- inch strip of wool be sheared off the animal's back between the 12th and 13th rib for good contact with the probe. Once the loin-eye image is captured on the ultrasound screen, the image is analyzed for loin-eye depth, LEA, and external back fat.

When is Best Test Time?

Understanding that weight and ultrasound go hand-in-hand is important. Most of the variation amongst animals at scanning time is attributed to weight and stage of development.

Finding a group of lambs exactly the same age and weight is difficult; therefore, ultrasound measurements need to be adjusted to a common body weight to accurately measure genetic merit. According to the National Sheep Improvement Program (NSIP) recom-

mendations, the time frame to ultrasound terminal breeds, i.e., Suffolk, Hampshire, Dorset, should be in the time frame closest to target market weight. Generally, the recommendation is 91 to 150 days targeting a weight of 150 pounds for terminal breeds.

In contrast, recommendations for Western range breeds, i.e., Rambouillet, Targhee, Columbia, that develop slower should have ultrasound scans collected from 151-304 days targeting a weight of 190 pounds.

Research at Montana State University found scanning Targhee yearling rams in a typical Western range development program at 190 pounds (approximately 12 months of age) is comparable to scanning intensively managed Suffolk ram lambs at 150 pounds (5 to 7 months of age). I realize holding replacement animals until a target scanning weight is difficult. Often, selection decisions are made at weaning and sorting and, consequently, collecting ultrasound information at such periods may be more convenient.

Although LEA scans of younger, lighter lambs may not be as precise as scans collected at target weights, identifying the upper and lower extremes in LEA in these groups of lambs is still very effective at improving the

carcass characteristics within flocks.

As we look ahead to increasing demand for American lamb, increasing the LEA will continue to improve consumer acceptance of American lamb and may put us at a competitive advantage over imported lamb.

Ultrasound Technology Can Add Value

Carcass ultrasound technology in the sheep industry is in its fledgling stages in terms of acceptance but will only continue to add value to the industry at both the ranch and retail level.

Rams that participate in the University of Wyoming Ram Test have this important information collected. Additionally, in certain areas of the state, UW extension educators are helping producers improve this important trait in their flocks by collecting ultrasound information at ranches.

For more information on how to utilize this resource, contact me at (307) 682-7281 or wstewart2@uwyo.edu.

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