



UW Cooperative Extension Service  Profitable & Sustainable Agricultural Systems

Insurance covering pasture, rangeland, forage now available to Wyoming producers

By John Hewlett

Since 2005 Wyoming has participated in a pilot Group Risk Plan (GRP) Rangeland insurance program, available only in eastern counties of the state – Campbell, Converse, Crook, Goshen, Johnson, Laramie, Niobrara, Platte, Sheridan, and Weston.

On September 6, Risk Management Agency (RMA) Administrator Eldon Gould announced a second insurance product is being expanded into Wyoming. This new product is known as pasture, rangeland, and forage (PRF) insurance – vegetation index.

The new PRF insurance was piloted in selected counties in Colorado, Idaho, North Dakota, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, and Texas in the 2007 crop year. Coverage is being expanded to include all of Wyoming and Alabama for the 2008 crop year.



PRF is a group risk policy that covers livestock grazing and forage land. The vegetative index version of this insurance uses normalized difference vegetation index (NDVI) data from satellite observations as an alternative measure of vegetation greenness. This index is used to estimate condition of the vegetation and productive capacity of the insured range or forage land. In general, healthier plants are assigned a higher NDVI value.

NDVI values are estimated for grid areas across covered counties.

These grids are approximately 4.8 by 4.8 miles in size. Grid location information, as well as historical NDVI values, may be found at the RMA Web site www.rma.usda.gov/policies/pasturerangeforage/.

Coverage is selected for one or more three-month intervals throughout the crop year.

Losses are calculated by estimating the NDVI deviation from normal for insured grid(s) and time of year enrolled. This insurance also takes into consideration public versus private land, warm- and

cool-season plants, different grazing patterns, and various forage species representing a wide range of relative feed values.

Producers are not required to enroll all eligible acres under their management. This allows the operator to insure only those acres that are most important to grazing or haying operations. In addition, by selecting a productivity factor, a producer may insure between 60 and 150 percent of the county base value. This allows the manager to match the amount of protection to the value of forage, as well as the productive capacity of the land. In fact, the product is flexible enough to provide coverage for areas around row crop fields declared as hay land and intended for harvest as hay for livestock.

Acres enrolled in PRF insurance are not eligible for the Non-insured Crop Disaster Assistance Program (NAP) available from the Farm Service Agency. In addition, producers in the eastern counties of

Wyoming noted above must choose either PRF or GRP Rangeland insurance prior to the closing date.

The closing date for PRF insurance is November 30. Persons interested in learning more about PRF insurance may visit the RMA Web site noted above or contact a local crop insurance agent. The Decision Support Tool and Historical Indices, available on the RMA Web site under the Group Risk Plan Vegetation Index, can provide additional insights on how this product may work for specific grid locations identified for insurance.

For more information about this and other risk management topics on the Web, visit the Western Risk Management Library online at <http://agecon.uwyo.edu/riskmgmt>.

John Hewlett is a farm and ranch management specialist in the University of Wyoming Department of Agricultural and Applied Economics. He can be reached at (307) 766-2166 or hewlett@uwyo.edu.

Supplementing the beef cow diet

By Lindsay Taylor

Supplemental feeding in beef cattle can mean a variety of things. By definition, supplementation is enhancing the diet by adding to it in areas of deficiency; however, to select the appropriate supplement for your herd, producers need to know what gaps in the diet need to be filled in. Does the supplement need to compensate for a lack of nutrients in a forage-based diet? Is the goal trying to maintain herd health by meeting cows' mineral needs? Does the supplement need to be a complete diet due to a lack of available forage?

In any of these cases, a supplement or combination of supplements may be necessary. Though in this last case total herd numbers may need to be examined to determine why there is not enough forage available.

Table 1 shows the basic requirements for an 1,100-pound mature cow in midpregnancy. The cow has dietary requirements of 7-percent protein, 48-percent total digestible nutrients (TDN, a measure of energy), 0.19-percent calcium (Ca), and 0.19-percent phosphorus (P). Beef cow nutritional requirements in various stages of production can be found in *Nutrient Requirements of Beef Cattle*, published in 1996 by the National Research Council.

Table 2 shows an estimate of dormant season range nutrient

availability in much of Wyoming. Native range in many areas of the state will vary from as high as 8-percent to as low as 3-percent protein, depending on when in the dormant season you examine them. Unless site-specific samples are clipped and submitted for testing throughout the year, an estimate of forage nutrients must be made. The nutrient make-up of forages depends on the plant communities, but in most rangeland settings 5-percent protein can be used as an approximation.

This same forage will maintain around 50-percent TDN. Standing plants continue to lose protein and P throughout the fall and winter, but energy and Ca levels persist. As late fall and early winter arrives, many of the cows in the state are on a lower-quality forage diet. While a native range diet is generally sufficient in energy and Ca during the middle third of cows' pregnancy, if daily intake levels are met, there may be a gap between the cows' requirements and nutrient availability for protein and P.

In many Wyoming rangeland cow/calf systems, supplementing the cow herd with protein and P will be sufficient until cows reach late pregnancy. In the last third of pregnancy an 1,100-pound cow has the need for a 7.8-percent protein, 53-percent TDN, 0.26-percent Ca, and 0.21-percent P diet (Table

3). At this point there is a need for energy supplementation. In this particular case, the diet becomes sufficient in everything except for P by adding 8.5 pounds of 16-percent protein alfalfa hay per head per day if the cows continue to eat 22 pounds of forage daily. The nutrient content of 8.5 pounds of 16-percent protein is shown in Table 4. When the combined diet of 8.5 pounds of alfalfa and 22 pounds of dormant-season forage is calculated the nutrient availability is 8.3-percent protein, 53-percent TDN, 0.61-percent Ca, and 0.12-percent P (Table 5).

This is just one example of comparing the nutrient requirements of a cow herd and the nutrient availability in the diet. Every operation will be different depending on the type and amount of forage, size, and production stage of the cow herd and environmental conditions. All of these can change the requirements and/or availability of nutrients. For more information about supplementing the nutrition of a cow herd, contact a local University of Wyoming Cooperative Extension Service office. Information is at <http://ces.uwyo.edu/Areas.asp>.

Lindsay Taylor is a livestock systems extension educator serving Campbell, Crook, and Weston counties. She can be reached at (307) 682-7281 or lrt10@ccgov.net.



Table 1. Nutrient requirements for an 1,100-lb dry bred cow in the middle third of pregnancy

Nutrient	%	1,100-lb Dry Bred Cow – mid preg (lb)	
		As Fed	Dry Matter
Intake	–	22-33	19.36
Energy	48	–	–
Protein	7.00	–	1.36
Calcium	0.19	–	0.04
Phosphorus	0.19	–	0.04

Table 2. Estimate of nutritional content of dormant-season fall range plant communities

Nutrient	%	Cow Grazing Fall Range (lb)	
		As Fed	Dry Matter
Intake	–	25	20
Energy	50	–	–
Protein	5.00	–	1.00
Calcium	0.27	–	0.05
Phosphorus	0.07	–	0.01

Table 3. Nutrient requirements for an 1,100-lb dry bred cow in the last third of pregnancy

Nutrient	%	Cow Grazing Fall Range (lb)	
		As Fed	Dry Matter
Intake	–	22-33	20.0
Energy	53	–	–
Protein	7.80	–	1.63
Calcium	0.26	–	0.054
Phosphorus	0.21	–	0.044

Table 4. Nutrient content of 8.5 lbs of 16% protein alfalfa hay

Nutrient	%	Cow Grazing Fall Range (lb)	
		As Fed	Dry Matter
Intake	–	8.5	7.65
Energy	60	–	–
Protein	16.00	–	1.22
Calcium	1.41	–	0.11
Phosphorus	0.22	–	0.02

Table 5. Nutrient content of 8.5 lbs alfalfa and 22 lbs dormant season native range diet

Nutrient	%	Cow Grazing Fall Range (lb)	
		As Fed	Dry Matter
Intake	–	30.5	25.25
Energy	53	–	–
Protein	8.30	–	2.1
Calcium	0.61	–	0.15
Phosphorus	0.12	–	0.03