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

# Using insurance to combat drought effects – Part I

By James Sedman and John Hewlett

Drought is on the minds of most producers this year.

According to the U.S. Department of Agriculture (USDA), as of mid-August more than 70 percent of the pasture in the country's major livestock producing regions is rated as "poor or very poor" condition.

Wyoming livestock producers and apiculturists have options managing production risk associated with pasture and forages: Vegetative Index-Pasture, Rangeland, Forage Insurance (VI-PRF).

VI-PRF was developed to be more effective than past group rangeland products based on countywide hay yields. The program insures against a vegetation index falling below a trigger level based on historic productivity information.

The index is developed using U.S. Geological Survey (USGS) satellite data measuring productivity in approximately 4.8 by 4.8- (or 23-square mile) mile grids. Producers can insure a percentage of the value of their production in three-

month intervals to coincide with their grazing or having programs but are not required to insure all of their acres. Purchase must be completed by November 15.

Indemnities are paid when the actual vegetation index drops below the trigger index value for the grid(s) selected for insurance. Total coverage is determined by the coverage level selected (70-90 percent) and the productivity factor selected (60-150 percent). The productivity factor individualizes coverage for the productivity of the area insured.

#### Comparison of VI-PRF Policy **Options**

A useful feature is that producers can use online tools to: 1. Identify individual grid points for insurance, and 2. Evaluate the historical performance of VI-PRF for selected grids. These tools are at http://ewebapp.rma.usda.gov/apps/ costestimator/.

Locate the grid point(s) to consider for coverage. After identifying grid points, the user can view historical vegetative index data for those points. This provides useful information in deciding: 1. How well the product may fit a particular situation, 2. Which acres are best to insure, and 3. The most appropriate level of coverage.

Every livestock operation has different risk management needs. However, comparing coverage options under

VI-PRF for an estimate of potential revenue protection and premium costs can be constructive. The online tools make this easy.

Assume, for the sake of discussion, that two Niobrara county ranches each have 2,000 acres of pasture in grid point 66791 eligible for insurance. Further assume the ranches are on each end of the coverage spectrum: Ranch A seeks maximum available coverage while Ranch B seeks minimal coverage. Both are interested in covering the July through September interval, with a Risk Management Agencyestablished county base value of \$7.96/acre.

Table 1. VI-PRF Strategy Comparison: Niobrara ranches insuring 2,000 acres in the July to September interval.

County base value	Productivity Factor (%)	Value of protection (\$/acre)	Total coverage per acre (at % of Productivity Factor covered)		
			70%	80%	90%
\$7.96	150%	\$11.94	\$8.36	\$9.55	\$10.75
			\$0.62	\$0.96	\$1.40
\$7.96	75%	\$5.97	\$4.18	\$4.78	\$5.37
			\$0.31	\$0.48	\$0.70
	\$7.96	\$7.96 150%	base value Factor (%) protection (\$/acre)  \$7.96 150% \$11.94	base value         Factor (%)         protection (\$/acre)         (at % / sacre)           \$7.96         150%         \$11.94         \$8.36           \$0.62         \$7.96         75%         \$5.97         \$4.18	base value         Factor (%)         protection (\$/acre)         (at % of Production Factor covers)           70%         80%           \$7.96         150%         \$11.94         \$8.36         \$9.55           \$0.62         \$0.96           \$7.96         75%         \$5.97         \$4.18         \$4.78

Ranch A utilizes a protection factor of 150 percent of the county base value giving a value of protection of \$11.94/acre. Ranch B selects a 75-percent protection factor yielding a value of protection of \$5.97/acre.

Depending on the coverage level chosen, Ranch A can purchase insurance for premiums ranging from \$0.62 to \$1.40/acre to receive total coverage ranging from \$8.36 to \$10.75/acre, respectively. Ranch B is able to insure its 2,000 acres of grazingland for premium costs ranging from \$0.31 to \$0.70/acre for \$4.18 to \$5.37/acre total coverage, respectively. The premiumcoverage tradeoff information is presented in Table 1.

In the next installment, we evaluate the effectiveness of these coverage choices under different loss scenarios.

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### Food most-deficient resource for wild bird habitat

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Upland game bird habitat, whether pheasants, turkey, sagegrouse, sharp-tailed grouse, or Hungarian partridge (and all wildlife), require three major necessities: food, shelter, and water.

Lacking any one of these greatly diminishes the ability to have a viable population of wild game birds. Not all three are required on a particular piece of land - one or more could be on adjacent land. Almost any water source will do for wild birds, but cover is not as easy to establish. Planting some shrub rows or shrub patches can develop cover.

#### Possible Grains, Legumes

Generally speaking, the most deficient resource needed for wild bird habitat is food. Properly selecting and planting seed can enhance the habitat. Start by selecting a grain such as corn, oats, wheat, barley, proso millet, or grain sorghum. These crops provide a good source of nutrition and some cover.

Another crop to consider is Austrian winter pea. This legume is high in protein and fixes nitrogen into the soil. Planting new, improved varieties of grasses can enhance pastures. These varieties can be taller and provide cover and food. In a pasture, legumes added

to grass could include birds-foot trefoil, vetch, sainfoin, alfalfa, and clover. Contact a UW Extension office for help selecting species.

#### **Seeding Preparation**

When preparing a food plot, the best procedure is to till the ground, control weeds, then plant.





Examples of wild bird habitat development. Note the pheasant in top photo.

The next best situation is to control weeds and then no-till the land and plant. Broadcasting the seed and then harrowing the land is the least-

effective method.

One key point when planting food plots is to make sure they are in blocks, and the bigger the block the better. If you plant rows, predators such as coyotes and foxes find it very easy to work down the rows and eat the wild

A rule of thumb for proper seed depth is to plant no more than two to three times the diameter of the seed. The bigger the seed, the deeper it can be planted. Most legumes like alfalfa should be planted no deeper than a quarter of an inch, and corn can be planted as deep as an inch.

The very coldtolerant Austrian winter pea can be

planted very early in the year or in the fall. The greater the variety of species planted will increase the amount of diversity available for wild birds. This diversity will provide different food components at different times of the year, which, hopefully, will correspond to the needs of the wild birds.

Select the lower seeding rate, particularly if mixing several varieties of seed. Remember, the goal is habitat and not necessarily top production. The other consideration is there are two main times of the year really critical for wild birds. The first is spring when they are nesting and the cover needs to provide a rich food source for the chicks. The second is fall to provide food and cover for the birds as they're going into winter.

By doing a little planting each year, the number of wild birds should dramatically increase.

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