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Insurance options manage pasture, forage risks, apiculture threats

By James Sedman and John Hewlett

Wyoming livestock and bee producers have several forage insurance options available.

Given recent periods of extreme drought and price variability, managers might consider addressing production risks using one or more of these tools.

These insurance programs help protect against serious production losses while helping to guarantee revenue levels.

Vegetation index - pasture, rangeland, forage insurance (VI-PRF) is an option for livestock and bee producers (VI-Apiculture) that is more effective and localized than previous programs relying on county yield data.

VI-PRF and VI-Apiculture insures against declines in an index using U.S. Geological Survey (USGS) satellite data measuring productive capacity in approximately 4.8 by 4.8 mile grids (23 square miles).

Producers can select one or more three-month periods to coincide with intended production or grazing periods. Indemnities are paid when the actual index falls below the trigger index for the selected grid area.

SIGN-UP DATES

November 15

- Vegetation Index – Pasture, Rangeland, Forage insurance (VI-PRF)
- Vegetation Index – Apiculture (VI-Apiculture)
- Noninsured Crop Disaster Assistance Program (NAP) acreage reporting deadline for forage crops including grazing

December 1

- NAP application deadline for fall seeded crops and forage

More information about the programs in this article is at:
www.rightrisk.org
www.rma.usda.gov
www.fsa.usda.gov

Total coverage provided is determined by the selected coverage level (70 to 90 percent) and the selected productivity factor (60 to 150 percent). The productivity factor is a percentage factor to individualize per-acre coverage in a specific grid; this allows producers the option to insure land for more or less than the grid base value if they believe it is appropriate.

A producer can elect to insure some or all of their acreage in a particular grid point.

Producers can log on to www.rma.usda.gov and click the "crop policies and pilots" and "rainfall and vegetation indices pilot" links to access the online calculator and links to help to determine their grid points, premium costs, and indemnity information.

Noninsured Crop Disaster Program (NAP)

The Noninsured Crop Disaster Program (NAP) administered by the Farm Service Agency (FSA) provides low-cost catastrophic loss coverage to producers when federal crop insurance is not available.

NAP coverage may be used separately but **not** in conjunction with VI-PRF and VI-Apiculture to provide protection against low yields and loss of inventory or prevented planting that occur due to natural disasters for a typical Wyoming ranch or farm. It can include grains planted for hay (and not insured as grain), native (grass) hay and certain mixed forages, and grazing land.

Coverage begins 30 days from sign-up. NAP covers losses of 50 percent or greater of expected production at 55 percent of the market price (set by the state committee).

Producers must meet income requirements associated with all FSA payment and disaster programs. The sign-up fee is $250 per crop per county or $750 total per county (no more than $1,875 total over multiple counties).

The 2008 Farm Bill required that livestock and apiculture producers enroll under **either** NAP coverage or crop insurance for all pasture, rangeland, and native hay forage crops to qualify for certain disaster assistance programs. These include the Livestock Forage Disaster Program (LFP) and Emergency Assistance for Livestock, Honey Bees, and Farm-raised Fish Program (ELAP). These requirements are expected under the new Farm Bill (or extension of the 2008 bill) but are uncertain until new legislation is passed by Congress.

Recent bulletins that explain how these programs may work for Wyoming operators include "Production Risk Management Options for Wyoming Ranches: Crop Insurance and Federal Disaster Programs" and "Risk Management Programs for Honey Bee Producers in Wyoming." They are in the Western Risk Management Library under New at http://riskmgt.uwagec.org.

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Putting soil back into the irrigation equation

Knowing soil type, characteristics can increase efficiency

By Caleb Carter

Irrigating at the highest efficiency possible throughout the growing season may mean the difference between a good harvest and the red line.

Understanding how soil type can affect irrigation effectiveness goes a long way in helping make the most of water allocations. I'll cover three steps to help put soil back into the irrigation equation:

1) Your soil type and why that is important,

2) The important soil characteristics to consider, and

3) Integrating this information into your irrigation plan.

Soil Types

A soil test tells more than just nutrient deficiencies – the texture and water-holding capacity of the soil can be determined. A sandy soil, with its large pore structure or grain size, holds less water than a finer-pore structured clay or silty soil, ranging from 10 to 25 percent by volume, or 1.2 to 3 inches per foot.

Think about a sponge when considering water-holding capacity. When dipped in water and pulled out, the sponge is saturated. When water stops dripping, the sponge is at field capacity (FC), or the maximum amount of water the sponge can hold. If all the water is wrung from the sponge into a cup, the water collected is the available water (AW), but the sponge is still wet. This is the wilting point (WP), or the point at which the pull from the sponge on the water is greater than the ability for you to squeeze it out. Knowing the FC and WP can tell you a lot about the best irrigation strategy to use.

This can be even more important for fields showing large variation in soil types. Changes in soil type across a field can lead to dry spots or boggy areas when managed the same. To avoid this, take representative soil samples from each area of the field identified as variable – either through previous soil samples or observation or by consulting Natural Resources Conservation Service soil maps.

Soil Infiltration Rate

Other factors include the soil infiltration rate and field slope. The infiltration rate of the soil determines how much water is absorbed while any excess is lost to runoff and/or evaporation. Soil texture strongly affects the infiltration rate, ranging from 0.2 to 0.8 inches per hour for saturated soil. Slope also strongly affects infiltration rates, decreasing it by 3 to 50 percent as the soil texture decreases.

All factors must be considered to devise an irrigation strategy. A sandy soil has a low FC and a high infiltration rate so excess water will exceed the FC and will be lost to deep drainage. While a clay soil has a larger water-holding capacity, it has a slow infiltration rate, taking longer to fill the soil profile and losing excess water to runoff.

Field Example

If a pivot is applying 2 inches of water per day to a field dominated by clay soil, which can only absorb about 1 inch of water per day, the other inch of water being applied is lost to runoff, evaporation, etc. Speeding up the pivot so it applies 1 inch in the same amount of time, then running it again to apply another inch, would apply the same amount of water while decreasing water loss.

Adjusting irrigation applications to match the soil infiltration rate and FC can maximize water applications by minimizing water losses and making the most of the water allocation. An average of the soils present allows for a good median, minimizing losses to runoff and/or deep drainage, in a field with variable soil textures.

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