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Wyoming crop insurance snapshot for 2013

By James Sedman and John Hewlett

Several major factors influenced crop insurance decisions in Wyoming for 2013, including severe drought at the national and statewide levels, irrigation water shortages, and relatively high commodity prices.

By the end of 2013, prices for most insurable crops had declined significantly and production losses were lower than in 2012. Wyoming's loss ratio (the ratio of insurance losses to gross premiums paid) declined to 1.03 from 1.19 in 2012.

Total dollar losses were approximately $1 million less than 2012. The total number of policies (2,523) did not change significantly from 2012, although the net insured acres increased from 1,220,593 to 1,787,621.

For most livestock insurance programs, the total dollar liability was $24,394,963 across all six policy types.

Table 1. 2013 Wyoming Crop Policies By Type

Type	Policies sold	Policies earning premium	Policies w/ indemnity	Net acres	Liabilities	Total premium	Indemnity	Loss ratio
APH	2,566	960	232	188,962	$59,107,839	$7,291,438	$4,189,336	0.57
RP	1,276	724	475	158,095	$45,217,009	$6,764,989	$11,694,689	1.73
RP-HPE	12	7	4	980	$255,142	$41,865	$38,972	1.60
YP	1,539	596	245	90,257	$28,731,199	$2,515,994	$3,633,032	1.44

For more information

Visit a local crop insurance agent for more information on what crop insurance strategy best fits the risk management needs of your operation. See RightRisk.org for an interactive risk management learning experience including online courses, tools, producer profiles, and other information. For an in-depth breakdown of 2013 insurance policies by county, visit RMA's website at www3.rma.usda.gov/apps/sob/.

Crop Production Policy Summary

Producers generally have the following choices for most crops: Revenue Protection (RP) with or without harvest price exclusion (HPE); Yield Protection (YP); and for crops where RP and YP is not available, the conventional Actual Production History (APH)-based policies are used.

For the 2013 crop year, producers insured 443,291 of 773,050 total crop acres or 57 percent.

Twelve different crops were insured. In terms of total acres insured, wheat was the largest at 132,030 acres, while potatoes was the lowest at just 126 acres insured.

In terms of loss ratio, both RP policies showed the highest values, with 1.73 for RP and 1.60 for RP-HPE. This is expected where prices declined by harvest time.

There are still a large number of acres (90,257) covered by YP polices, indicating a potential for growth in RP sales over coming years.

Livestock/Other Programs

Livestock price insurance programs, including Livestock Risk Protection (LRP) and Livestock Gross Margin (LGM), are still relatively under-used (or in some cases unused) and offer opportunities for producers to manage downside price risk.

Four types of livestock (or dollar liability type) insurance had zero participation in 2013: LGM-cattle; LGM-dairy cattle; LRP-fed cattle; and LRP-swine.

Lamb producers continue to use LRP, insuring well over $12 million in liability. LRP for feeder cattle total liability doubled over 2012, showing some growth in this still underused program.

Pasture, Rangeland, Forage-Vegetative Index insurance (PRF-VI) showed considerable growth over 2012, most likely due to the severe drought in 2012.

Table 2. PRF-VI Comparison

Year	# Policies	Net acres	Total liability	Total premium	Indemnity	Loss ratio
2012	127	769,568	$4,896,190	$853,373	$1,082,300	1.27
2013	224	1,349,958	10,457,387	1,754,261	3,812,582	2.17

The 2012-2013 comparison is shown in Table 2 above. Total liability grew from $4,896,190 to $10,457,387. Policies earning premiums grew from 127 to 199, and total acres insured grew from 769,568 to 1,349,958. Total indemnities increased substantially from 2012 to $3,812,582, while the loss ratio more than doubled.

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Be aware of selenium toxicity threat to Wyoming livestock

By Scott Cotton

Selenium is an essential mineral element nutrient for human and animal health but excess intake of selenium is often toxic.

Selenium (Se) is carried in runoff water in many areas of Wyoming and is absorbed by the plants that are often consumed by animals. Early documentation of selenium toxicity to livestock dates back to the 13th century in China and veterinarian documentation in South Dakota as early as the 1850s.

Acute and Chronic Toxicity

Toxicity generated by consuming excess selenium can be **acute** (a one-time consumption of heavy amounts) or **chronic** (accumulation of smaller amounts ingested over time). Symptoms of selenium toxicity in livestock are usually called blind staggers due to lack of coordination and unusual behavior.

Selenium toxicity blind staggers in livestock usually involves symptoms that include head pressing, excess perspiration, abdominal pain (kicking stomach), colic, diarrhea, increased heart rate, rapid breathing, and lethargy or listlessness.

Chronic selenium toxicity (referred to as alkali disease) that has not progressed to staggers usually includes lack of vigor, rough hair coat, loss of hair, hoof soreness, and ridging/cracking/sloughing of hoof walls.

Since selenium is sediment generated from specific rocks, it is not found everywhere in Wyoming but is regularly found especially along the North Platte River drainage and several other watersheds.

Common Toxicity Contributors

Selenium toxicity occurs in areas with a few commonalities including:

- Arid or semi-arid climates with less than 20 inches of annual precipitation (much of Wyoming).
- Soils with pH levels above 7.0 (most non-mountain areas of Wyoming).
- Soils developed from shale.

Selenium is usually released and transported via several processes. Mining, which exposes shale strata to air, releases selenium onto the landscape. Normally a sub-soil element, selenium can be incorporated into soil surfaces and plants by excessive irrigation, erosion, deposition of coal combustion wastes, and incineration of municipal wastes.

Most livestock require some selenium in their diets, but if you live in a selenium-rich area, it's a waste of money to have selenium added to livestock feed or supplements.

Acute selenium toxicity (selenosis) usually results in respiratory failure within a few hours to several days.

Prevention Methods

The best news is that selenium toxicity and poisoning can be prevented using a combination of range management and testing techniques. Soil and water tests can clearly identify if selenium is an issue for animals.

Normal selenium levels are:

- less than 2 parts per million for total soil Se,
- less than 50 parts per billion for water soluble Se,
- and less than 1 part per million Se in plants.

If tests come back greater than 2 ppm water, greater than 50 ppb water, or greater than 1 ppm for plants, there is a "seleniferous" situation.

In drinking water, the maximum level is 0.01 ppm for humans and 0.05 ppm for livestock.

Maintaining effective pasture condition (especially in droughts when erosion is higher) is crucial to avoid problems.

Since selenium is often higher in affected areas of subsoil, many of the deeper-rooted plant species pull the mineral into plant tissue at a higher rate. Making sure livestock have more desirable forage alternatives is the first key practice. If they are forced to browse shrubs, the risks increase.

Since a number of poisonous and toxic plants can accumulate selenium and are eaten for forage, livestock having other grazing options rather than being forced to try eating plants such as milkvetches, prince's plume, woody asters, and goldenweeds, is crucial.

Good grass, testing, and knowing your landscape combined with recognizing the signs of toxicity are the keys to prevent losing livestock and productivity. More information is available as factsheets, articles, and contacting the author or other University of Wyoming Extension educator.

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