

## RI-PRF coverage for non-irrigated hay

We looked at how Pasture, Range, Forage - Rainfall Index (RI-PRF) insurance may work for dryland or non-irrigated hay in a previous installment.

RI-PRF is one of the better options for producers to address at least some of the production risk associated with rainfall.

In our example, we selected grid ID 28901 in Weston County using the decision support tool found at [rma.usda.gov](http://rma.usda.gov). The tool generates a table describing the percentage of normal index values for each interval and year back to 1948 using rainfall records. For example, April-May of 2019 was 208 percent of normal, while 2016 was 86 percent of normal.

We selected haying, non-irrigated, non-organic, 90 percent coverage level, and a productivity factor of 150 percent for 100 acres in sample year 2017. This is the maximum coverage available under RI-PRF; we selected 50 percent of the coverage allocated to the May-June interval and 50 percent to the July-August interval. The county base value is set by RMA at \$92 (per acre), with a total dollar amount of protection at \$124.20 (per acre). The producer premium per acre is \$9.64 (\$964 total for the 100 acres).

In 2017, the online tool shows an estimated indemnity at this coverage level of \$393 (paid in the May-June interval), making the effective cost of this policy \$571 (\$964-\$393.)

By selecting the estimated indemnities tab, a user can view how many years this exact coverage level would have generated an indemnity payment for each coverage interval back to 1948.

For the May-June interval over the past 20 years, there would have been an indemnity payment made in each of 10 years, with an indemnity greater than the premium in six of those years.

### Changing coverage levels and intervals

One of the most useful features of the tool allows the user to compare coverage levels to attain the desired premium/coverage level.

For example, if we lower the coverage level to 70 percent and the productivity factor to 100 percent, and keep the same intervals, the total coverage provided drops to \$6,440 (\$3,220 in each interval), with a producer premium dropping to \$2.22 per acre (or \$222 total).

Changing the percentage for the coverage interval can be estimated with the tool, such as allocating 70 percent coverage to the May-June interval and 30 percent to the July-August interval. This raises the expected indemnity payments to \$551 total.

Intended Use	Index Interval	Percent of Value (%)	Policy Protection Per Unit	Premium Rate Per \$100	Total Premium	Premium Subsidy	Producer Premium	Actual Index Value	Estimated Indemnity
Haying - Non-irrigated - Not Organic - 90% Coverage Level - Productivity Factor 150% - Insurable Interest 100% - Insured Acres 100 - Sample Year 2017	Jan-Feb	N/A	\$0	23.27	\$0	\$0	\$0	148.8	\$0
	Feb-Mar	N/A	\$0	20.00	\$0	\$0	\$0	114.1	\$0
	Mar-Apr	N/A	\$0	16.88	\$0	\$0	\$0	189.9	\$0
	Apr-May	N/A	\$0	14.50	\$0	\$0	\$0	112.2	\$0
	May-Jun	50	\$6,210	15.04	\$934	\$476	\$458	84.3	\$393
	Jun-Jul	N/A	\$0	12.87	\$0	\$0	\$0	105.1	\$0
	Jul-Aug	50	\$6,210	16.64	\$1,033	\$527	\$506	93.4	\$0
	Aug-Sep	N/A	\$0	19.72	\$0	\$0	\$0	127.3	\$0
	Sep-Oct	N/A	\$0	23.81	\$0	\$0	\$0	151.6	\$0
	Oct-Nov	N/A	\$0	22.58	\$0	\$0	\$0	144.4	\$0
	Nov-Dec	N/A	\$0	20.16	\$0	\$0	\$0	188.6	\$0
	<b>Total</b>	<b>100</b>	<b>N/A</b>	<b>\$12.4</b>	<b>\$124.20</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

### Pasture, Rangeland and Forage Insurance - Rainfall Index (RI-PRF) Policy Overview

- RI-PRF is an area insurance plan designed to protect producers against decreases in precipitation using a historic rainfall index.
- The policy uses 17x17-mile grids as part of the rainfall index determined by NOAA, divided into 11 two-month index intervals.
- Producers choose their intervals (non-consecutive with no more than 70 percent of coverage in any one interval) and desired coverage between 70-90 percent.
- Producers can also choose a productivity factor of up to 150 percent of the index value.
- Indemnities are paid if the insured value falls below the determined index value for insured intervals.

### Pasture, Range, Forage - Rainfall Index Insurance (RI-PRF)

- Sign-up Deadline:** Nov. 15 for coverage in 2020
- RI-PRF web tools:** [prodwebnlb.rma.usda.gov/apps/prf#](http://prodwebnlb.rma.usda.gov/apps/prf#); access the grid locator/decision tool and view historical data for your area

To make our example easy to follow, we selected only two coverage intervals: however, depending on the situation, users could spread coverage over more intervals (two is the minimum).

### Making coverage decisions

Remember, the goal of RI-PRF should be to help manage production risk, not maximize potential indemnity payments.

Coverage decisions should be based on individual acreages and grids when comparing index values for various intervals.

For instance, if our example operation required at least \$6,000 of hay revenue

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### FOR MORE INFORMATION

Contact a participating crop insurance agent or visit [rma.usda.gov](http://rma.usda.gov) for more information about Pasture, Range, Forage - Rainfall Index Insurance (RI-PRF) and how it may fit with your risk management strategy.

PRF support tools are at [prodwebnlb.rma.usda.gov/apps/prf](http://prodwebnlb.rma.usda.gov/apps/prf). These are a great way to get started to view coverage options and historical data for your area.

For more risk management education options on the web, visit [RightRisk.org](http://RightRisk.org), where you can find numerous risk management tools, including online courses, producer profiles, and other risk management resources.

### Visit RightRisk.org for the Risk Scenario Planning Tool

- The RSP tool allows producers to account for uncertain variables in their partial budget projections and closely analyze potential decisions (like purchasing an RI-PRF policy).
- The RSP tool includes preloaded examples and a detailed user guide.
- The RSP tool is available at [RightRisk.org](http://RightRisk.org): select Risk Management Tools under the Resources tab.

## Cull cow considerations

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The annual costs of maintaining a beef cow is at least \$700 per year for most cow-calf operations.

That number may seem ridiculously high; however, once the many expenses required to maintain her (feed, equipment, labor, vet expenses, etc.) is considered, costs can add up quickly!

Most cow-calf producers (including myself) are probably guilty of keeping one of their favorite cows for "one more year" after she comes up open. Most times, these decisions are made because of sentimental reasons. Many of these operations also have cows that are 13+ years old and even though they are still productive, are starting to show signs of aging.

These decisions can be impactful when studied from a business perspective. Receipts from cull-cows make up about 15-20 percent of gross income for cow-calf operations; however, the costs of maintaining a non-productive cow can be the real difference maker. Culling decisions directly affect the quantity and quality of calf production and, ultimately, influence profitability.

The truth is, putting cows on the truck that have sentimental attachments to and/or have been some of our most productive herd members in the past is hard. But knowing when it's time to make these tough decisions can be very impactful to genetic progress and your bottom line. How do you know when?

With profitability in mind, here are a few key things to consider when developing a systematic process for culling cows to which ALL members of the herd should be exposed.

### Pregnancy status

This is probably the most obvious factor when determining whether to keep a cow or not. It's recommended producers determine how long they want their breeding and calving periods to last (45-60 days is usually ideal) and then cull cows that aren't pregnant after that. If she's not producing a calf, she is costing you hundreds of dollars per year to keep her around! How much are you willing to pay to keep an open cow?

### Structural soundness

We in Wyoming have high expectations for cows to graze and perform in harsh, vast environments. Cows that remain sound enough on their feet to maintain body condition, calve, and rebreed every

year is imperative. Structure issues tend to only get worse with time and eventually will catch up with them. Identifying structure problems early should always be a priority.

### Body condition

Body condition is a huge indicator of reproductive success. Cows that lack body condition have higher probabilities of being open cows. Additionally, thin cows have greater chances for calving difficulty. Even if thin cows are getting bred during the breeding season, it may be possible she is calving a few days later each year, her calf weights are declining, and she will eventually fall out of the 365-day ideal calving window.

### Udder quality

Not only is milk production important for calf growth, but so is the structure and quality of the udder. Ask yourself if her udder is still adequate to meet the needs of her calves going forward. Does she have four good productive quarters with good teat attachments? Will her calves be able to easily access the milk they need? Selection for udder quality is a moderately heritable trait, so maintaining dams with good udder attachment should be included in the selection criteria.

### Mouth

The cow needs to have enough teeth to graze and ruminate effectively. Aged cows may lose teeth or wear them down enough to negatively impact their ability to maintain the demands of pregnancy and her environment. A bad mouth can affect digestibility and intake, putting her at risk of being an open cow.

### Disposition

It always seems like the meanest cows breed back every year and raise some of the best calves! However, maintaining cows with attitude problems will likely mean future generations with attitude problems. Even if these crazy calves do well in a range setting where they are not handled much, they will likely struggle to gain as much in the feedlot compared to their gentle herd mates. Additionally, meat quality in temperamental cattle is often less desirable.

### Other health issues

A cow's history of various health issues that have been costing you money and may cost you more in the future are the last things to keep in mind. Cows with incidences of retained placentas or prolapses are at risk for reoccurring issues and should be strong culling candidates. Also, cows that have dealt with infections, lump jaw, and other issues are also at risk. Consider selling these females while they are recovered and more valuable and before they are sick again.

Making the reasonable decisions to cull cows is not easy, but these decisions are an important piece of the profitable production puzzle. Hopefully, these considerations will make those decisions a little bit easier.

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to meet their risk management goals, then the minimal coverage option we examined would be sufficient.

Coverage interval choices should be made based on rainfall variation and historic weather patterns. For example, dryland hay in Wyoming typically needs spring or early summer precipitation. Premium costs should be considered as well, although RI-PRF coverage is available at relatively low premiums for the coverage provided.

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