



# Rainfall Index for Pasture, Rangeland, and Forage (RI-PRF) Insurance Tool



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## INTRODUCTION

Rainfall Index for Pasture, Rangeland, and Forage (RI-PRF) insurance, commonly referred to as PRF insurance, is a vital risk management tool for farmers and ranchers in the United States. This innovative insurance program, administered by the United States Department of Agriculture's Risk Management Agency (USDA RMA), offers protection against forage losses caused by inadequate rainfall. Here's what you need to know about RI-PRF:

## PROGRAM OVERVIEW:

### 1. Coverage and Index:

- RI-PRF insurance policies are structured around geographical units called "grids." Each grid cell is associated with a specific location with historical rainfall data available.
- Producers choose the grid that includes their grazing or forage land. This grid serves as the basis for rainfall measurements and insurance coverage calculations.

### 2. Coverage Levels:

- Producers have the flexibility to choose their coverage level, ranging from 70% to 90% of the historical rainfall and a productivity factor for their

policy. The productivity factor (ranging from 60 to 150 percent) allows the insured to adjust coverage based on expected forage value for their operation, relative to the average historical productivity level within their grid.

- Opting for higher coverage levels and productivity factors results in higher premiums but provides increased protection against rainfall-related losses.
- Producers must also select the number of acres to insure, which can be all their land or only one fraction of it.

### 3. Time Intervals Within a Year to Insure:

- Producers must select at least two 2-month time intervals within a year to insure. The sum total of the coverage must be 100% across all selected intervals.

### 4. Index Calculation:

- The RI-PRF program uses nearby weather station rainfall data within a grid in conjunction with historical average rainfall to calculate the rainfall index for a grid during specific coverage periods.
- An indemnity payment is triggered if the actual rainfall index for the two-month period falls below the coverage level selected by the producer, suggesting a significant reduction in forage availability would be expected.

### 5. Indemnity Payments:

- When the rainfall index for a selected grid cell falls below the chosen coverage level, the producer becomes eligible for an indemnity payment.
- The payment amount is determined by the producer's coverage level and productivity factor, ensuring that the assistance aligns with the level of protection chosen.

### 6. Premiums and Enrollment:

- Producers are responsible for paying premiums based on various factors, including the selected

coverage level, productivity factor, and the specific grid location.

- Enrollment for RI-PRF insurance typically occurs annually on December 1st before the calendar year being covered. The program is administered by approved crop insurance providers who facilitate the enrollment process.

## REGIONAL VARIATIONS

It's essential to recognize that the details and availability of RI-PRF insurance may vary by state and region. Producers interested in RI-PRF insurance should consult with a local USDA RMA representative or an approved crop insurance provider to gain a comprehensive understanding of the program's specific details, coverage options, and enrollment procedures tailored to their area.

The Rainfall Index (RI) Pasture, Rangeland, and Forage (PRF) insurance, offers a unique and effective solution to protect farmers and ranchers from the adverse effects of reduced forage production due to insufficient rainfall. By utilizing historical rainfall data and a flexible coverage system, RI-PRF provides valuable risk mitigation for those whose livelihood depends on the health and availability of forage resources.

PRF tool with Missouri data can be accessed at <https://farmanalysis.usu.edu/rainfall>



Look Tutorial for use of the PRF tool at <https://youtu.be/4TixNks58zE>.



Consult the USDA RMA website for additional information about PRF insurance at:

<https://www.reddsummit.com/counties>

<https://www.rma.usda.gov/Policy-and-Procedure/Insurance-Plans/Pasture-Rangeland-Forage>

REFERENCES

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Washington National Office — (2017) Washington, DC. <https://www.rma.usda.gov/en/Fact-Sheets/National-Fact-Sheets/Pasture-Rangeland-Forage-Pilot-Insurance-Program>
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3. McKenzie Carvalho, Myriah Johnson, Amy Hagerman. Is Rainfall Index Pasture, Rangeland and Forage Insurance Right for You? (2019) Oklahoma State University. Extension. <https://extension.okstate.edu/fact-sheets/is-rainfall-index-pasture-rangeland-and-forage-insurance-right-for-you.html>.
4. Rod Sharp and Jeff Tranel. Pasture, Rangeland, Forage (PRF) Insurance: A Possible Drought Management Tool for Colorado Ranchers. Colorado State University Extension <https://extension.colostate.edu/docs/pubs/drought/drought-strategies.pdf>
5. Ryan Milhollin, Ray Massey, Joe Horner. Pasture, Rangeland, Forage (PRF) Insurance in Missouri (2022). Extension of University of Missouri. <https://extension.missouri.edu/publications/g457>

## PRF Insurance

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### Policy Options

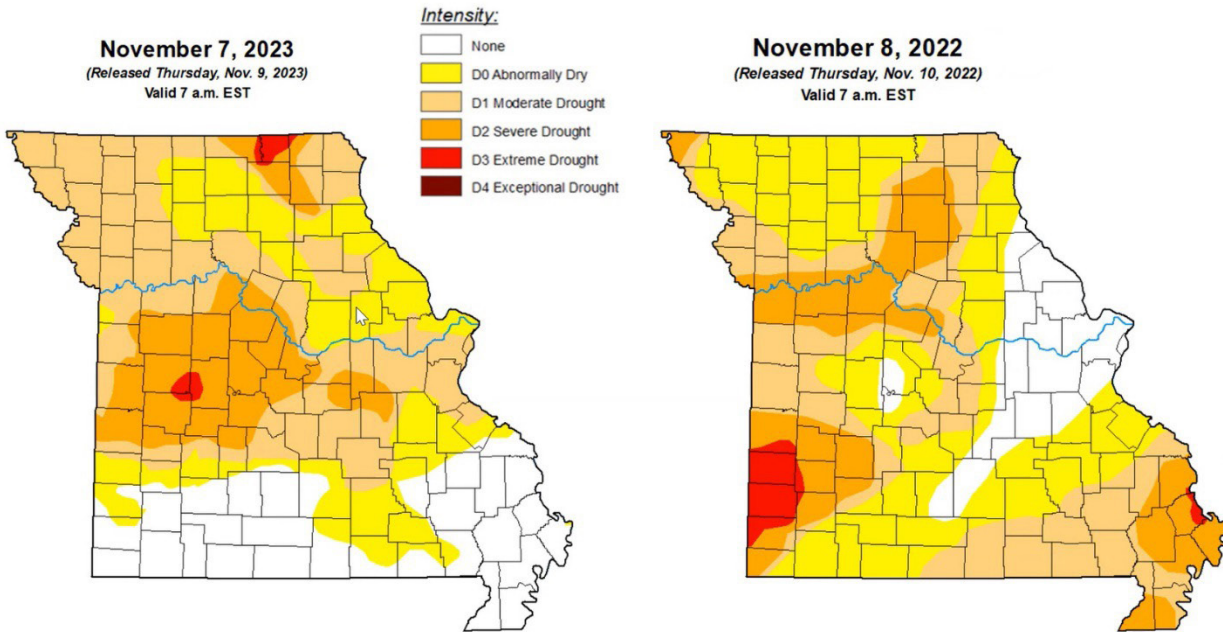
Location		Basic	show all	Interval	Percent
State:	Missouri	Coverage:	90	Sep-Oct	40.0
County:	Cole	Productivity:	130	Nov-Dec	60.0
Grid:	22052	Insured acres:	00	<a href="#">Add</a>	

[Historical Data](#)
[Submit](#)

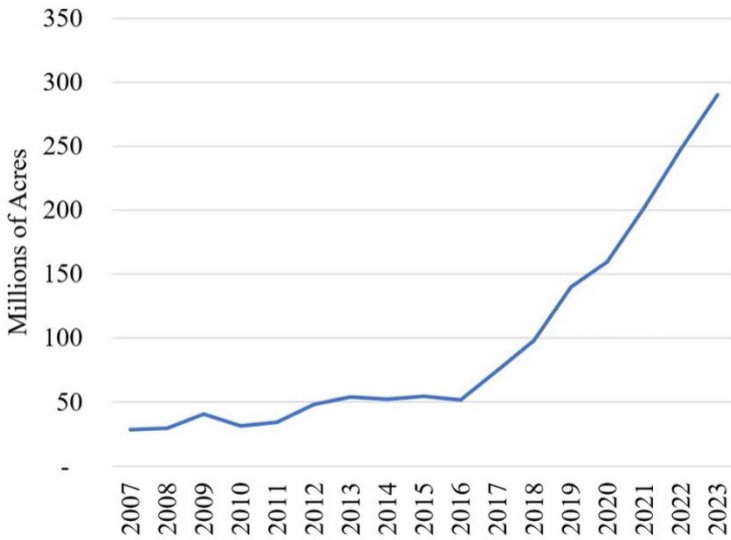
Policy Facts		2022 Summary		Payment Details				
County Values		Total	Per Acre	Interval <small>more</small>	Producer Premium	Indemnity	Return	
Base Value:	\$47.10	Total Premium:	\$691.48	\$11.52	Sep-Oct	\$121.06	\$317.43	\$196.37
Dollar Protection:	\$55.11	Subsidy:	\$352.66	\$5.88	Nov-Dec	\$217.76	\$368.13	\$150.37
Total Protection:	\$3306.60	Producer Premium:	\$338.82	\$5.65				
Subsidy Level:	51%	Indemnity:	\$685.56	\$11.43				
		Return:	\$346.74	\$5.78				

6. PRF tool with Missouri data <https://farmanalysis.usu.edu/rainfall> by Kyle Feuz, Weber State University, Ryan Larsen, and Ryan Feuz, Utah State University.





### PRF Acres Insured by Year



According to the USDA, Pasture, Rangeland, and forages cover approximately 55 percent of all U.S. land (2.43 billion acres).

- There is still room for continued growth in this program

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