

Annual Forage Insurance

Essentials and Application to Water-Limited Settings

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Essentials and Applications

- What where when why how
- Applications for producers facing water shortages
 - Triticale AF versus Triticale APH
 - Dual-use wheat AF + MPCl



What is it?

- Like PRF, but for annually-produced forage crops
- When it rains less than usual in your area within a 2-month period during the USDA-defined growing season, you get paid
- Deadline: July 15
 - Crops used for forage planted from August 2026 through July 2027



Many forage insurance options

- Regular insurance, MPCl
 - Silage sorghum endorsement
 - Triticale APH
 - Alfalfa RP under development
- Index insurance
 - Pasture, Rangeland, and Forage (PRF)
 - Annual Forage (AF)
- Whole Farm Revenue Protection



Why? Insurance Attributes

- Standard multi-peril crop insurance (MPCI) might not be available
- MPCI might have some disadvantages
 - Written agreement
 - Producer doesn't have a production history
 - Forage yields may be difficult to establish



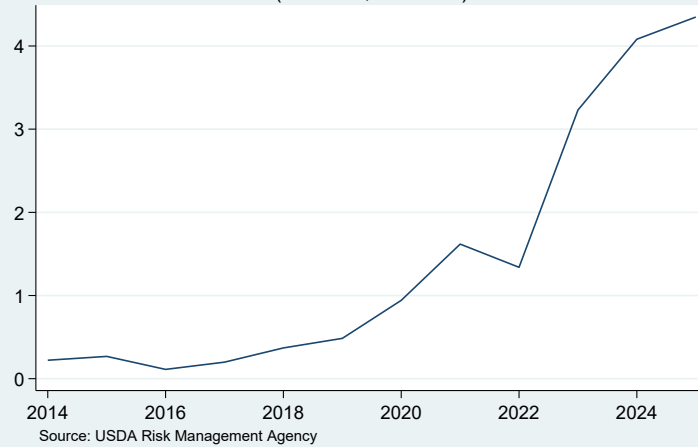
Why? Water Limitations

- Annual forage production can be part of a drought or deficit-irrigation management strategy
 - Lower water requirements than grain crops depending on management
 - Local forage production is more cost-effective than grain in general, and especially during drought



KS AF Acres Enrolled, 2014-2025

(Unit: 100,000 acres)

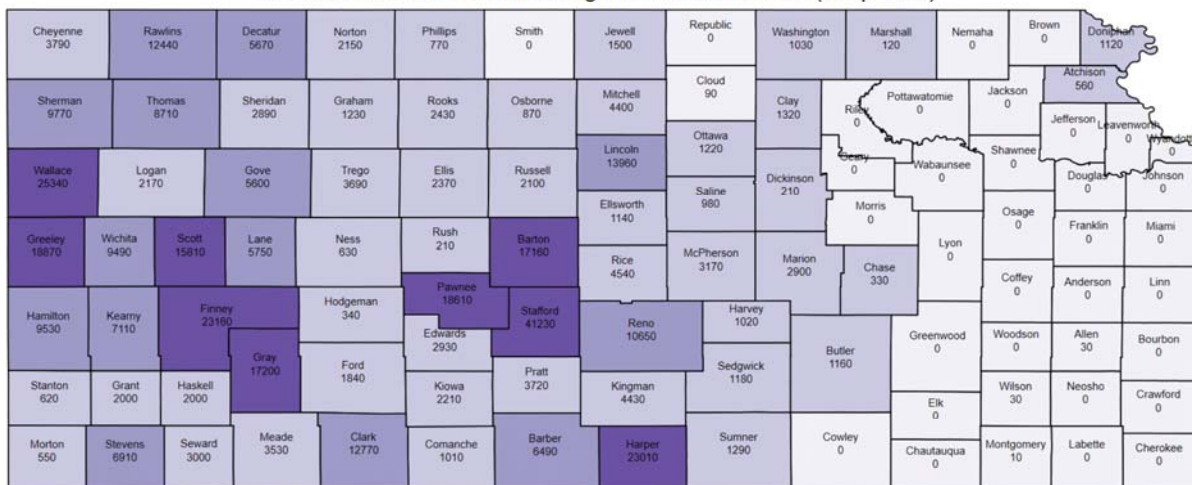


Note: The 2025 crop year is still in progress—2025 acreage is not final

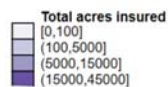
US acres enrolled: 178,000 in 2014 to ~4.3 million in 2025 in CO, KS, ND, NE, NM, OK, SD, TX



Acres enrolled in Annual Forage Insurance in 2024 (Crop Year)



Source: The data used in this map was downloaded on June 5, 2025 from the USDA Risk Management Agency Summary of Business.



WHEN IT **RAINS LESS THAN USUAL IN
YOUR AREA WITHIN A 2-MONTH
PERIOD DURING THE USDA-DEFINED
GROWING SEASON, YOU GET PAID**



What: Rainfall index

- Single peril – precipitation* is *lower* than the historic average
 - Source: National Oceanic and Atmospheric Administration's (NOAA) Climate Prediction Center
 - Pulls from weather stations, may vary based on data availability
 - Estimated as a percent of average precipitation using data from 1948
- Index
 - 100 = average
 - 120 = higher than average
- Index: 75 = lower than average



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What: Less than usual

- 100 = *normal* weather
- Producer selects a coverage level of 70-90%
- Payouts are made when rainfall index effectively falls below the coverage level
 - If the rainfall index is 60, payouts will be made
 - If the rainfall index is 80, payouts will be made depending on coverage level selected
 - 70% doesn't pay out, 90% does
 - If the rainfall index is 90 or higher, no policies will make a payout



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Where: Area Insurance

Rainfall is
measured for an
approximately
14 X 16* mile
grid.

<http://af.agforceusa.com/ri>



Where: Area Insurance

- Payouts are based on what happens for the entire grid, not a particular operation/field
- Payouts might not match field-level experience
 - Management approaches
 - Study historic data
 - Take a long-term approach



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When: Growing Season

- Crop is planted during a given month
- The next seven months are the growing season for which you can purchase AF coverage
- Example 1
 - Planting in August 2025
 - Growing season 1 is September 2025-March 2026
- Example 12
 - Planting in July 2026
 - Growing season 12 is August 2026-February 2027

Note: Growing seasons 5 & 6 not eligible for coverage in Kansas. Crops planted in Dec/Jan would be reported as growing season 7



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When: Intervals

- Coverage is provided in consecutive 2-month periods called intervals
- Producer selects specific intervals and decides how important each interval is
 - Premiums and payouts are based on weights
 - Higher weights have higher premiums and higher payout
- For growing seasons 1-4 and 7-9, 3 intervals must be selected
 - Weights of 20-40% that add up to 100%



Intervals

		Intervals and Months																												
Growing Season	Planting Month	S/O	O/N	N/D	D/J	J/F	F/M	M/A	A/M	M/J	J/J	J/A	A/S	S/O	O/N	N/D	D/J	J/F	F/M	M/A	A/M	M/J	J/J	J/A	A/S	S/O	O/N	N/D	D/J	J/F
1	August																													
2	September																													
3	October																													
4	November																													
5	December																													
6	January																													
7	February																													
8	March																													
9	April																													
10	May																													
11	June																													
12	July																													

Source: Collin Olsen <https://www.agmanager.info/2023-kansas-crop-insurance-presentations/rma-update>



When: Interval Example 1

- Planting in August 2025
- Growing season 1 is Sept 25-Mar 26
- Sept-Oct Interval: 40%
- Nov-Dec Interval: 40%
- Jan-Feb Interval: 20%
- March: not covered



When: Interval Example 10

- For growing seasons 10-12 (only), **two** OR **three** intervals can be selected
 - Highest weight is 50%
- Example
 - Planting in May 2026
 - Growing season 10 is June 26-December 26
 - Jun-July Interval: 50%
 - Aug-Sept Interval: 50%
 - Oct-Dec: not covered



Agronomic Considerations

- Timing of precipitation and forage yield
- May vary by region, season, and crop



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Why: Value of insured crop

- Big picture: the value of the crop is determined county-by-county, but producers have some flexibility to increase or decrease their insurance guarantee
- The county base value (CBV) is the estimated value of the insured crop.
 - In KS, the CBV varied from \$289 (Morton)-\$458 (Doniphan) for the 2025 crop year.
- Productivity factor
 - CBV can be scaled up or down, from 60%-150%
 - CBV X Productivity factor ranges from \$173-\$687
- Guarantee: CBV X Productivity Factor X Coverage Level (70-90%)



Why: calculating indemnities

- Suppose you have a CBV of \$300 and select a 90% coverage level. Your guarantee (protection) is \$270.
 - Suppose the you select 2 intervals, each with 50% weight. The protection in each interval is \$135 ($\270×0.5).
- The first interval index is 10
 - Rainfall is 10% of the historic average.
- You get paid $(\$300/2) \times (0.90 - 0.10) = \120
 - Your indemnity of \$120 “brings you back” to your protection of \$135
 - $(.1 \times (\$300/2)) + \$120 = (\$15 + \$120) = \$135$

Yellow=CBV Purple=protection Green=indemnity



Example 1: Triticale

- Scott county
- Triticale is being produced for silage at a nearby feed yard
- Producer could use Annual Forage or Triticale APH***
- Scenario: Triticale is produced in rotation with corn, both are irrigated
- Planted in (early) September (Growing season 2)

***Triticale APH is a grain policy, so the crop yield must be measured "as grain"



Example 1: Annual Forage, 90% coverage level

Interval	Weight (% of Value)	Producer Premium	Protection	Actual Index	Indemnity
Oct-Nov	40	\$19	\$118	210.4	\$0
Jan-Feb	20	\$8	\$59	9.5	\$53
Mar-Apr	40	\$14	\$118	TBD	TBD
TOTAL	100	\$41	\$296		\$53

Estimate (only) from <http://af.agforceusa.com/ri>. Grid is 22016. Mar-Apr interval actual index has not been reported yet. County base value is \$328, guarantee (protection) can range from \$138-\$443, depending on productivity factor and coverage level.



Example 1: Triticale APH

- Yield policy
 - APH = average production history
 - Assuming no yield history, our example uses the county t-yield
- 2025 Crop Year Guarantee
 - 75% coverage level
 - \$5.17/bushel* X 55 bushel/acre irrigated triticale t-yield
 - \$213/acre guarantee
 - Approximate premium per acre
 - \$14 optional units, \$13 basic units
- Low likelihood of payout (for 2025 crop year) based on yield losses
- Contact price can be used, up to \$11.74/bushel



Comparison: guarantee

- Annual Forage could provide a maximum guarantee of \$443 in this scenario
- Triticale APH, if using the maximum contract price and irrigated t-yield, could provide a guarantee up to \$549



Example 2: Dual Use Wheat

- Ford County
- Wheat is grazed over the winter, harvested for grain in June
- Producer can use a lower-value AF policy and insure crop as grain under a standard MPCI policy
- Planted in (late) September – growing season 2

Note: The same API must write both policies



Example 2: Annual Forage (Dual Use), 90% coverage level

Interval	Weight (% of Value)	Producer Premium	Protection	Actual Index	Indemnity
Oct-Nov	40	\$6	\$42	291.2	\$0
Dec-Jan	40	\$6	\$42	18	\$33
Feb-Mar	20	\$3	\$21	19.5	\$16
TOTAL	100	\$15	\$104		\$49

Estimate (only) from <http://af.agforceusa.com/ri>. Grid is 20820. County base value is \$289, but this is reduced by 40% for the dual use option. Protection/guarantee is thus $\$289 \times 0.4 \times 0.9 = \$104/\text{acre}$.



Example 2: Wheat RP

- Practice: Summer-fallow (dryland)
- Revenue Protection (RP) Policy
 - Most common policy
- 2025 Crop Year Guarantee
 - 75% coverage level
 - \$5.90/bushel X 46 bushels/acre (county expected yield)
 - \$204/acre guarantee
 - Approximate premium per acre
 - \$6/acre if using enterprise units
- Unlikely to trigger in 2025 based on yield losses
- Short-rate option



Wrap up

- Annual Forage insurance is one of many options to manage forage risk
- There is a learning curve, especially if no PRF experience
 - Work closely with an insurance agent
 - Acreage reporting
- You are not required to insure all acreage*



Resources

- Local insurance agents

<https://www.rma.usda.gov/tools-reports/agent-locator>

- Online decision tool

<http://af.agforceusa.com/ri>

- Local extension educators
- Experienced producers
- AgManager.info

<https://agmanager.info/crop-insurance/kansas-crop-insurance-maps>

<https://agmanager.info/crop-insurance/livestock-insurance-papers-and-information/annual-forage-insurance-policy-basics-0>

