MP591

2025 SUMMARY OF THE

Arkansas Hay Verification Program

DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

Summary of the 2025 Arkansas Hay Verification Program

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PREPARED BY:

- **Kacie Gibbins:** Program Associate, Hay Verification Coordinator, University of Arkansas, Division of Agriculture
- **Brian Mills:** Assistant Professor, Agricultural Economics and Agribusiness, Mississippi State University
- **Bronc Finch:** Assistant Professor, Soil Fertility, University of Arkansas, Division of Agriculture
- **James Mitchell:** Assistant Professor, Livestock Marketing and Management Specialist, University of Arkansas, Division of Agriculture
- **Ryan Loy:** Assistant Professor, Agricultural Economics and Agribusiness, University of Arkansas, Division of Agriculture
- **Kevin Lawson:** County Extention Agent - Agriculture, University of Arkansas, Division of Agriculture

CONTRIBUTORS:

David West – Cleveland Co. Ag Agent; Scott Hayes – Drew Co. Staff Chair; Kavin Lawson – Faulkner Co. Ag Agent; Brad McGinley – Grant Co. Staff Chair Brian See – Marion Co. Staff Chair; Anna Grace McCarty – Pulaski Co. Ag Agent; Tyler Caston – Stone Co. Staff Chair; Cody Salmon – Boone Co. Staff Chair Adam Willis – Newton Co. Staff Chair; Paige Berrett – Baxter Co. Ag Agent; Monty Rexwinkle – Carrol Co. Ag Agent.

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Introduction and Program

This report summarizes results from the 2025 Arkansas Hay Verification Program (AHVP). The AHVP is a collaborative effort among Arkansas forage producers, county Extension agents, and state Extension specialists. The program's purpose is to verify the effectiveness of Extension recommendations for economically producing high-yielding, high-quality hay through collaboration aligned with producer goals and management practices.

The AHVP provides management recommendations on an as-needed basis and collects information on inputs and management decisions throughout the production season. Economic analyses are conducted for each operation to provide insight into operating costs, breakeven thresholds, and overall profitability, thereby strengthening on-farm decision-making.

Fields across Arkansas that are primarily used for hay production may enroll in the AHVP for two years. In 2025, seven fields located in Cleveland, Drew, Faulkner, Grant, Marion, Pulaski, and Stone counties participated in the program (Figure 1). Fields are required to be managed for hay production throughout the growing seasons in which they are enrolled. The 2025 fields represented a variety of predominantly warm-season forage grasses.

Figure 1. Arkansas map highlighting the 7 counties enrolled in the 2025 Arkansas Hay Verification Program.

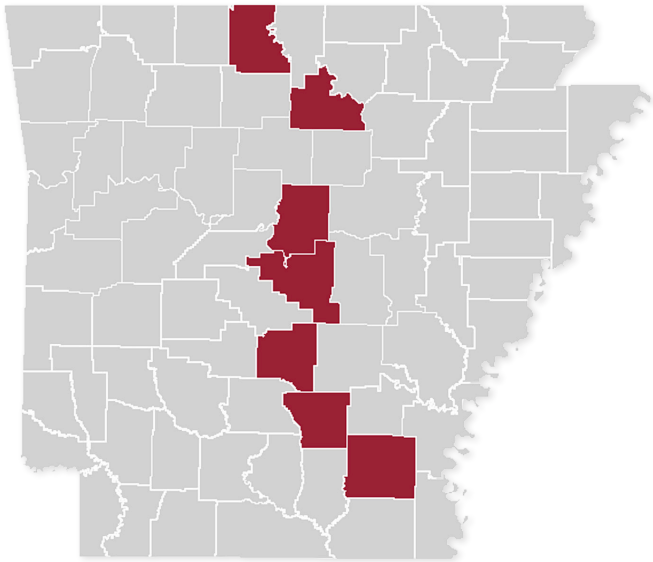


Table 1. Field acreage, average production (ton/acre) and total production (tons) for the 2025 Arkansas Hay Verification Program.

SPECIES	ACREAGE	AVERAGE PRODUCTION (tons/acre)	TOTAL PRODUCTION (tons)	TOTAL PRODUCTION (tons)
Cleveland	Bahiagrass	20	2.99	59.92
Drew	Mixed WSG*	6.5	5.10	33.10
Faulkner	Mixed WSG*	100	3.09	275.78
Grant	Mixed WSG*	8	1.90	15.23
Marion	Bermudagrass	46	3.37	154.88
Pulaski	Mixed WSG*	91	2.70	81.17
Stone	Mixed WSG*	16	3.56	56.96

*WSG – Warm Season Grasses

Total acreage enrolled in the 2025 AHVP was 287.5 acres, with an average field size of 41.07 acres. Total production reached 677 tons, averaging 3.24 tons per acre. Based on the national average hay price of $138 per ton received by farmers in August 2025, the estimated average value of production was $447.12 per acre. (USDA-NASS, 2025)[1].

Economic Data Collection

Participating producers worked with county Extension agents to collect production and economic data used as inputs for the Mississippi State budget generator. For each field operation – such as fertilizing, cutting, raking, or baling – relevant details were recorded, including equipment make, model, horsepower, and operating width. Prices and quantities for fertilizer, poultry litter, lime, pesticides, and herbicides were documented for each application. Additional costs, including custom application rates, net wrap, and equipment rental fees, were also recorded when

[1]USDA-NASS reports two categories of hay: Alfalfa and All Other Hay. The price used in budgets and value of production calculations is the national average All Other Hay price. USDA-NASS stopped reporting a price for Arkansas in 2024. Budgets prior to 2024 use the Arkansas-specific price. Readers should note this discrepancy when comparing to previous AR HVP reports.

available. Hay yields were calculated based on bale counts and the average weight of a minimum of 10% of total production at each harvest.

The Mississippi State University (MSU) farm budget generator is designed to help producers develop detailed financial plans. Users input operation-specific data such as crop type, acreage, expected yields, and input costs. Based on recorded field activities, the tool estimates per-acre machinery costs – including fuel, labor, repairs, depreciation, interest, and taxes – using established engineering standards. The resulting enterprise budget provides estimates of revenue, expenses, and profitability metrics such as net income and return on investment.

Budgets for each farm are provided in Appendix A. Each table reports revenue from hay production using a standard price of $138 per ton, reflecting the national average reported in August 2025. National pricing is used because Arkansas-specific hay price reporting was discontinued in 2024. Direct, fixed, and total specified costs are calculated for each operation. Direct costs include inputs such as fertilizers, herbicides, insecticides, fuel, labor, and custom applications. Hay hauling is treated as a separate enterprise and is not included. Fixed costs include depreciation as well as expenses such as interest, taxes, and equipment housing. Total specified costs are the sum of direct and fixed costs.

Summary of 2025 Budgets

Table 2 summarizes hay production budgets for the seven fields in the 2025 AHVP. Total direct costs averaged $210.48/acre and ranged from $155.21/acre in Grant County to $269.03/acre in Marion County. Fixed costs averaged $64.16/acre in 2025, with values ranging from $46.45/acre in Stone County to $86.09/acre in Cleveland County. Total specified costs, including both direct and fixed costs, averaged $274.63/acre and ranged from $207.59/acre in Grant County to $333.08/acre in Marion County. Breakeven prices are calculated by dividing total specified costs by hay production per acre. The average breakeven price across the 2025 fields was $87.20/ton and ranged from $64.49/ton in Drew County to $109.29/ton in Grant County. Estimated net returns for the 2025 program averaged $174.85/acre, with estimates ranging from $54.61/acre in Grant County to $374.91/acre in Drew County.

Table 2. 2025 AHVP Costs, Returns and Breakeven Prices.

COUNTY	TOTAL COSTS ($/acre)			NET RETURNS[a] ($/acre)	BREAKEVEN[b] PRICE ($/ton)
	DIRECT	FIXED	SPECIFIED		
Cleveland	$158.41	$86.09	$244.50	$169.50	$81.50
Drew	$268.82	$60.07	$328.89	$374.91	$64.49
Faulkner	$206.29	$85.86	$292.15	$135.65	$94.24
Grant	$155.21	$52.38	$207.59	$54.61	$109.26
Marion	$269.03	$64.05	$333.08	$136.12	$97.96
Pulaski	$156.96	$54.21	$211.17	$161.43	$78.21
Stone	$258.61	$46.45	$305.06	$191.74	$84.74

[a] Net returns, estimated revenue minus total specified costs, using $138/ton for hay prices
[b] Total specified expenses divided by hay production per acre.

Table 3 summarizes per-acre expenses for selected direct cost categories across the seven verification fields in 2025. Fertilizer represented the largest of the cost categories, averaging $87.29/acre. Commercial fertilizer was applied to all fields in 2025 except the Pulaski County field, and fertilizer costs varied across locations (standard deviation of $42.77/acre). Poultry litter was applied to two fields with an average cost of $91.66/acre and little variance between the neighboring counties of Marion and Stone. Herbicide costs also exhibited considerable variability, ranging from $7.10/acre and $81.00/acre, which may reflect the variation of weed pressure and field condition across locations. Smaller expense categories include fuel ($19.16/acre), labor ($24.62/acre), and repairs and maintenance ($24.07/acre).

These categories showed little variation but still reflect production differences in equipment use and management practices. Interest on operating capital averaged $7.34/acre. Custom applications and harvest costs were calculated for three of the seven fields at $9/acre. The miscellaneous cost category, labeled "Other", includes items such as net wrap and averaged $10.05/acre.

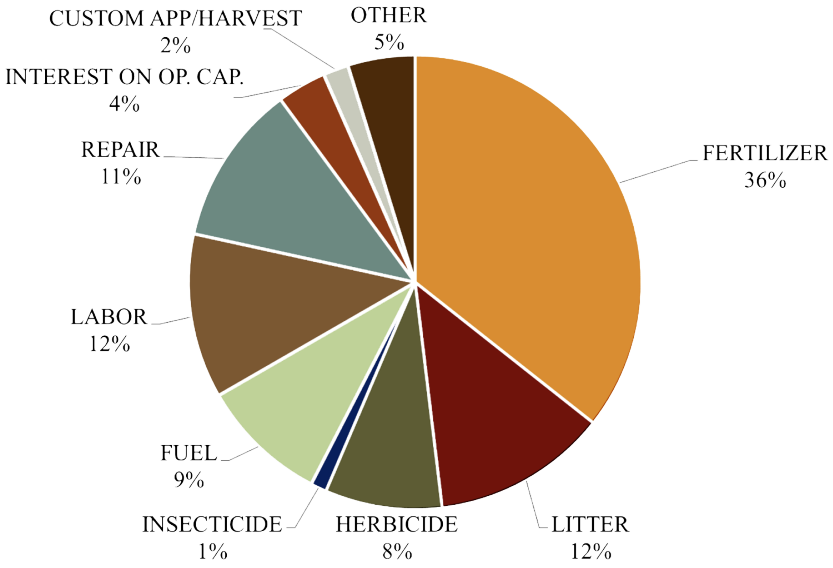
Figure 2 presents the weighted average of reported input costs for the 2025 program, where the average includes fields that did not utilize specific inputs. Fertilizer made up 36% of total direct costs across the program. Poultry litter, the next largest input cost category, represented 12% of total direct costs. Herbicide costs, reported by four fields during the 2025 program, accounted for 8% of total direct costs, while insecticide costs, reported only in Faulkner County, represented 1%.

Table 3. Summary of costs ($/acre) for fields participating in the 2025 Arkansas Hay Verification Program.

COST ITEM	*n*[a]	AVERAGE	STD. DEV.	MAX	MIN
Fertilizer	6	87.29	42.77	178.15	51.39
Litter	2	91.66	1.66	93.32	90.00
Herbicide	4	30.68	29.59	81.00	7.10
Insecticide	1	16.65	--	16.65	16.65
Fuel	7	19.16	3.83	28.09	16.38
Labor	7	24.62	3.72	30.72	20.56
Repair & maintenance	7	24.07	4.08	30.92	20.29
Interest on op. cap.	7	7.34	2.26	11.40	5.17
Custom app/harvest	3	9.00	--	9.00	9.00
Other[b]	7	10.05	3.94	17.27	5.54

[a] Number of occurrences for each input cost category reported for the 2025 season.
[b] Items include consumables such as net wrap, twine, etc.
Note: Average ($/acre) is the average amount spent on each cost item across the seven fields, representative of fields that used specific input cost category. This is not an "average cost" as defined in economics, which typically refers to the total cost per unit of output.

Figure 2. Weighted total direct costs for fields participating in the 2025 Arkansas Hay Verification Program.



Production Data Collection

County extension agents worked in partnership with cooperating producers to obtain field-level data necessary for developing management recommendations and evaluating forage production and quality. Soil sampling was conducted during the dormant season of warm-season forages in accordance with University of Arkansas Division of Agriculture (UADA) guidelines. Sampling procedures included the collection of one composite sample per approximately 20 acres or less, consisting of approximately 15 cores collected to a depth of 4 inches. All soil samples were submitted to the UADA Marianna Soil Testing Laboratory for analysis of soil pH, Mehlich-3 extractable nutrients, and estimated soil texture (Table 4). Results from fields with multiple composite samples were averaged for field representation. Fertilizer recommendations were provided to address needs adequately based on individual samples.

Forage management recommendations were provided on an as-needed basis and encompassed topics such as nutrient management, herbicide and insecticide application, and harvest management. Hay yield for each harvest was quantified by weighing a minimum of 10% of total production. The mean bale weight was then extrapolated to

Table 4. Soil properties from the 7 fields participating in the 2025 Arkansas Hay Verification Program.

COUNTY	TEXTURE†	CEC†	pH	OM	P	K	S	Ca	Mg
	---	*cmolc/kg*	---	%	---ppm ---				
Cleveland	Silt Loam	8	5.5	--	32	71	8	675	71
Drew	Silt Loam	11	6	2.9	70	102	8	1356	148
Faulkner	Silt Loam	12	6.2	4.7	47	92	14	1529	96
Grant	Silt Loam	7	5.9	3.0	136	46	10	783	45
Marion	Silt Loam	10	6.5	--	172	119	9	1313	89
Pulaski	Clay Loam	20	5.8	--	35	215	12	2324	550
Stone	Silt Loam	11	6.1	3.4	59	101	17	1347	70

†Soil Texture and Cation Exchange Capacity (CEC) are estimated based on other measured soil properties.

Table 5. Hay yield and quality parameters for the 7 fields participating in the 2025 Arkansas Hay Verification Program. Harvest results are presented in sequential order within each county.

COUNTY	AS IS YIELD	MOISTURE	CRUDE PROTEIN	TOT. DIGEST. NUTRIENTS	NUTRIENT REMOVAL		
	(tons/acre)	%	%	%	*N*	P_2O_5	K_2O
					---(lb/acre) ---		
Cleveland	1.58	7.6	10.1	54.2	47.22	8.70	36.97
	0.91	9.1	8.8	55.3	23.38	5.32	22.61
	0.50	7.4	8.4	55.7	12.47	3.40	12.30
Drew	4.13	16.7	12.3	54.2	135.25	22.03	120.08
	0.97	8.2	8.2	55.2	23.29	5.69	25.46
Faulkner	1.09	10.0	11.9	56.8	37.42	9.00	30.07
	1.34	7.4	11.3	58.8	44.81	22.13	84.52
	0.66	13.6	8.9	57.1	16.13	8.30	22.79
Grant	1.39	6.5	13.9	56.2	57.94	11.33	25.11
	0.51	12.9	9.8	57.8	13.93	3.87	15.53
Marion	1.73	11.4	16.1	59.7	78.88	16.83	63.83
	1.64	13.5	12.6	60	57.16	18.83	76.87
Pulaski	0.90	11.6	7.5	37.8	19.19	7.32	24.66
	1.80	9.0	4.3	48.1	22.54	14.25	52.10
Stone	1.91	8.0	6.3	54.2	35.46	22.55	76.72
	1.65	7.0	7.8	55.7	38.27	20.36	67.61

estimate total field yield based on the total number of bales produced (Table 5). Hay quality samples were obtained by collecting at least one core from each weighed bale. These samples were analyzed at the UADA Fayetteville Agricultural Diagnostics Laboratory to determine moisture content, crude protein concentration, and fiber composition (https://aaes.uada.edu/technical-services/fayetteville-agricultural-diagnostic-analytical-laboratory/#).

Summary of the 2025 Arkansas Hay Verification Program

The 2025 AHVP included seven verification fields covering 287.5 acres across the state. Average forage production was 3.24 tons per acre in 2025, which was 0.79 tons per acre less than the 2024 (Mitchell & Mills, 2025). Field summaries provide a timeline of key management practices and highlight challenges faced by individual producers throughout the growing season. All seven fields experienced a delayed first harvest, which for most producers did not occur until late June. County agents and producers attributed this delay to continual rainfall and extremely wet conditions. Later in the season, some fields were reported to have experienced extremely dry conditions that led to stunted growth, reducing interest in fertilizer applications and third harvests. Only two fields, located in Cleveland and Faulkner counties, achieved a third harvest in 2025. These weather-related delays, reduced inputs, and limited harvests likely contributed to the lower average production observed this year.

Direct costs averaged $210.48 per acre in 2025, representing a 38% decrease from 2024 (Mitchell & Mills, 2025). Producers reported that adverse weather conditions influenced management decisions, including skipping fertilization applications and other field events, which likely contributed to the reduction in input costs. Fertilizer remained the largest input cost, accounting for 36% of the program's total direct expenses. All seven fields achieved breakeven prices below the annual hay price of $138 per ton reported by USDA-NASS (2025), resulting in positive net returns for each field.

Overall, the 2025 AHVP demonstrated that research-based Extension recommendations can support economically viable hay production, even under challenging weather conditions. Despite delayed harvests and variable moisture throughout the season, all seven fields achieved positive net returns, illustrating the effectiveness of recommended management practices. The program continues to provide producers with timely management support, helping them make data-driven decisions, optimize inputs, and achieve individual operational goals.

CLEVELAND COUNTY

A 20-acre bahiagrass field near Calmer in Cleveland County was enrolled in the 2025 Hay Verification Program. A soil sample was collected in December to develop a nutrient management plan for the upcoming hay season. Due to effective management in previous years, weed pressure was minimal, and no herbicide applications were necessary.

The first harvest occurred on June 10, producing 67 4-ft. by 5-ft. bales with an average weight of 944 pounds per bale. A hay analysis from the first harvest showed a crude protein (CP) concentration of 10% and total digestible nutrients (TDN) of 54.2%.

Following the first harvest, a fertilizer application of 75 pounds of urea and 75 pounds of potash per acre was made on June 14. The second harvest occurred on July 29, yielding 55 bales averaging 664 pounds per bale, with 8.8% CP and 55.3% TDN. Due to very dry conditions and no forecasted rainfall, no fertilizer was applied after the second harvest.

The field was cut for the third and final time on September 29, producing 23 bales averaging 872 pounds per bale, with CP and TDN concentrations of 8.4% and 55.7%, respectively. The Cleveland County field produced a total annual yield of 3.0 tons of hay per acre, with specified costs of $244.50 per acre and a breakeven price of $81.50 per ton ($32.60 per 800-lb. bale). Net returns, calculated using a hay price of $138 per ton ($55.20 per 800-lb. bale), were $169.50 per acre.

DREW COUNTY

A 6.5-acre field located at the University of Arkansas at Monticello farm in Drew County, consisting primarily of bahiagrass and bermudagrass, was enrolled in the 2025 Hay Verification Program for the second year. Soil

samples were collected in March 2025 to develop a management plan aligned with hay production goals.

The first fertilizer application – 100 pounds of urea, 83 pounds of ammonium sulfate, and 108 pounds of potash per acre – was applied on May 16. The first harvest occurred on June 23 and produced 53 4-ft. by 5-ft. round bales averaging 1,012 pounds per bale. Hay analysis showed CP levels of 12% and TDN of 54%.

Following the first harvest, a second fertilizer application of 124 pounds of urea and 100 pounds of potash per acre was made on July 9. Due to extremely dry conditions, the mower was adjusted to leave a 5-inch stubble height in preparation for the second harvest. On August 18, the field produced 13 bales averaging 967 pounds per bale, with 8% CP and 55% TDN.

A rain gauge recorded 2.58 inches of rainfall between July 15 and September 3. Due to limited rainfall and extreme heat, the second harvest yield was low, and a third harvest was not feasible.

In summary, the field produced 5.10 tons of hay per acre, exceeding the 4-ton goal, with specified costs of $328.89 per acre and a breakeven price of $64.49 per ton ($25.80 per 800-lb. bale). Net returns were $374.91 per acre.

FAULKNER COUNTY

A 100-acre bermudagrass field near Saltillo in Faulkner County was enrolled in the 2025 Hay Verification Program. A soil sample was collected on March 6 to develop a nutrient management plan. A burndown herbicide application of 1 quart 41% glyphosate, 0.33 ounces of Patriot, and 1 quart of 2,4-D amine was applied on March 11.

The first harvest occurred on June 20; however, continuous rainfall allowed only 70 acres to be cut. This harvest produced 200 4-ft. by 5-ft. bales averaging 764 pounds per bale. Hay quality was 12% CP and 57% TDN.

Following the first harvest, 150 pounds of 28-0-5-6 plus 100 pounds of potash per acre were applied on July 2. The second harvest on July 21 yielded 339 bales averaging 790 pounds per bale, with 11% CP and 59% TDN.

The field was scouted regularly for armyworms, and the treatment threshold was reached in early August. An application of 9 ounces per acre of Besiege was made on August 11. The third harvest on August 17 yielded 150 bales averaging 874 pounds per bale, with 9% CP and 57% TDN.

Total production was 3.09 tons per acre, with specified costs of $292.15 per acre and a breakeven price of $94.24 per ton ($37.70 per 800-lb. bale). Net returns were $135.65 per acre.

GRANT COUNTY

An 8-acre warm-season grass field near Poyen in Grant County was enrolled in the 2025 Hay Verification Program. A soil sample was collected on April 10 to develop a nutrient management plan. Between April 1 and the first harvest on June 27, the field received 30.26 inches of rainfall.

Due to excessive soil moisture, no fertilizer was applied prior to the first harvest. This harvest produced 25 4-ft. by 5-ft. round bales averaging 892 pounds per bale, with 14% CP and 56% TDN.

A fertilizer application of 137 pounds of urea and 166 pounds of potash per acre was made on July 3. However, limited rainfall following application reduced yield. The second harvest on August 7 produced 8 bales averaging 1,020 pounds per bale, with 10% CP and 58% TDN.

Due to continued dry conditions, a third harvest was not attempted.

Total production was 1.90 tons per acre, with specified costs of $207.59 per acre and a breakeven price of $109.26 per ton ($43.70 per 800-lb. bale). Net returns were $54.61 per acre.

MARION COUNTY

A 46-acre bermudagrass field near Ralph in Marion County was enrolled in the 2025 Hay Verification Program. A soil sample was collected on March 13 prior to a burndown herbicide application of 1 quart glyphosate and 0.75 ounces of Patriot per acre on March 21.

On May 1, the field received 4 tons per acre of poultry litter, supplying 80 pounds of nitrogen, 40 pounds of P2O5, and 60 pounds of K2O per ton. The first harvest on June 27 produced 183 4-ft. by 5-ft. bales averaging 869 pounds per bale, with 16% CP and 60% TDN.

A second fertilizer application of 69 pounds of urea and 120 pounds of potash per acre was applied on July 3. The second harvest on July 23 produced 157 bales averaging 960 pounds per bale, with 12% CP and 60% TDN.

A third harvest was prevented by an armyworm infestation that reduced forage growth.

Total production was 3.37 tons per acre, with specified costs of $333.08 per acre and a breakeven price of $97.96 per ton ($39.18 per 800-lb. bale). Net returns were $136.12 per acre.

PULASKI COUNTY

A 91-acre mixed warm-season grass field in Pulaski County was enrolled in the 2025 Hay Verification Program. Soil samples were collected on March 10 to determine nutrient availability and develop a fertilizer management plan.

The first harvest occurred on June 9, producing 94 5-ft. by 6-ft. round bales averaging 770 pounds per bale, with 8% CP and 38% TDN.

For broadleaf weed control, 3 quarts of 2,4-D per acre were applied on July 15. The second and final harvest on August 15 produced 106 bales averaging 849 pounds per bale, with 4% CP and 48% TDN.

Total production was 2.70 tons per acre, with specified costs of $211.17 per acre and a breakeven price of $78.21 per ton ($31.28 per 800-lb. bale). Net returns were $161.43 per acre.

STONE COUNTY

A 16-acre warm-season grass field near Timbo in Stone County was enrolled in the 2025 Hay Verification Program. The primary goal was to increase both hay yield and quality, with a secondary goal of increasing the proportion of bermudagrass.

On March 5, the field received 2 tons of poultry litter per acre. An herbicide application of 1 quart glyphosate and 0.3 ounces of metsulfuron per acre was applied on March 25 for weed control.

A soil sample was collected on April 8. Excessive rainfall delayed ryegrass planting until early April and postponed the first harvest until June 23. This harvest produced 77 4-ft. by 5-ft. bales averaging 800 pounds per bale, with 6% CP and 54% TDN.

On July 11, a fertilizer application of a fertilizer application of 108 pounds Urea and 100 pounds Potash per acre was made. The second harvest, on August 4th, consisted of 1150 small square bales averaging 46 pounds per bale, with 8% CP and 56% TDN levels. Weekly scouting for armyworms and Bermuda Stem Maggots (BSM) occurred throughout the year. BSM was detected at economic thresholds before the second harvest. However, due to drought conditions and lack of forecasted rainfall, insecticide or additional fertilizer applications were deemed economically impractical. In summary, the Stone County verification field produced an annual total production of 3.56 tons of hay per acre, with specified costs of $305.06 per acre and a breakeven price of $84.74 per ton of hay ($33.90 per 800 lb. bale). Net returns calculated using an estimated hay price of $138 per ton (55.20 per 800 lb. bale) were $191.74 per acre.

Table 6. Forage species, field size, harvest dates, and total yield for fields participating in the 2025 Arkansas Hay Verification Program.

COUNTY	SPECIES	FIELD SIZE (acre)	HARVEST DATES			YIELD (tons/acre)
			1st	2nd	3rd	
Cleveland	Bahiagrass	20	June 9	July 29	Sept 29	3.00
Drew	Mixed WSG*	6	June 23	Aug 18	--	5.09
Faulkner	Mixed WSG*	100	June 20	July 21	Aug 17	3.09
Grant	Mixed WSG*	8	June 27	Aug 7	--	1.90
Marion	Bermudagrass	46	June 27	July 23	--	3.37
Pulaski	Mixed WSG*	91	June 9	Aug 15	--	2.70
Stone	Mixed WSG*	16	June 23	Aug. 4	--	3.56

*WSG – Warm Season Grasses

Table 7. Fertilizer applications for each applicable timing for the 12 fields participating in the 2024 Hay Verification Program.

COUNTY	GREEN-UP	AFTER 1ST HARVEST
	----------(lb/acre)----------	
Cleveland 1	--	75 lb. Urea
Drew	100 lb. Urea + 108 lb. Potash + 83 lb. Am. Sulfate	124 lb. Urea + 100 lb. Potash
Faulkner	--	150 lb. 28-0-5-6 + 100 lb. Potash
Grant	--	137 lb. Urea + 166 lb. Potash
Marion	4 Ton Poultry Litter	+ 69 lb. Urea +120 lb. Potash
Pulaski	--	--
Stone	2 Ton Poultry Litter	108 lb. Urea + 100 lb. Potash

Urea (46-0-0); Am. Nit. (34-0-0); DAP (18-46-0); TSP (0-46-0); Potash (0-0-60); Am. Sulfate (21-0-0-24S).

Table 8. Pest management dates and products used for fields participating in the 2025 Arkansas Hay Verification Program.

COUNTY	DATE	HERBICIDE	INSECTICIDE
		----------(product/acre)----------	
Cleveland	--	--	--
Drew	--	--	--
Faulkner	March 11	32 oz Glyphosate + 0.33 oz Patriot + 32 oz 2,4-D	--
	Aug. 11	--	9 oz Besiege
Grant	--	--	--
Marion	March 12	0.75 oz Patriot	--
	July 3	1.33 oz OutRider	--
Pulaski	July 15	3 qt 2, 4-D	--
Stone	March 25	1 qt Glyphosate + 0.30 oz MSM 60	--

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Appendix
Farm Budgets

Table A1. Estimated Costs and Returns per acre, Cleveland County 2025.

ITEM	UNIT	PRICE	QUANTITY	TOTAL AMOUNT
INCOME				
Bahiagrass	(tons)	$138.00	3	$414.00
			TOTAL INCOME	$414.00

DIRECT EXPENSES				
FERTILIZER				
Urea + Potash	(lbs)	$0.34	150	$51.00
OTHER				
Net Wrap	(bale)	$1.35	7.4	$9.99
OPERATOR LABOR				
Tractors	(hour)	$18.69	1.5693	$29.33
HAND LABOR				
Implements	(hour)	$9.06	0.0421	$0.38
DIESEL FUEL				
Tractors	(gal)	$2.86	8.4814	$24.26
REPAIR & MAINTENANCE				
Implements	(acre)	$33.91	1.00	$33.91
Tractors	(acre)	$5.12	1.00	$5.12
INTEREST ON OP. CAP.	(acre)	$4.42	1.00	$4.42
			TOTAL DIRECT EXPENSES	$158.41
			RETURNS ABOVE DIRECT EXPENSES	$255.59

FIXED EXPENSES				
Implements	(acre)	$47.66	1.00	$47.66
Tractors	(acre)	$38.43	1.00	$38.43
			TOTAL FIXED EXPENSES	$86.09
			TOTAL SPECIFIED EXPENSES	$244.50
			RETURNS ABOVE TOTAL SPECIFIED EXPENSES	$169.50

Table A2. Estimated Costs and Returns per acre, Drew County 2025.

ITEM	UNIT	PRICE	QUANTITY	TOTAL AMOUNT
INCOME				
Warm Season Mix	(tons)	$138.00	5.1	$703.80
			TOTAL INCOME	$703.80
DIRECT EXPENSES				
FERTILIZER				
Urea	(lbs)	$0.30	224	$67.20
Nitrogen stabilizer	(oz)	$0.78	33.5	$26.13
Potash	(lbs)	$0.32	208	$66.56
Amm Sulfate	(lbs)	$0.22	83	$18.26
OTHER				
Net Wrap	(bale)	$1.35	10.2	$13.77
OPERATOR LABOR				
Tractors	(hour)	$18.69	1.1678	$21.83
HAND LABOR				
Implements	(hour)	$9.06	0.0842	$0.76
DIESEL FUEL				
Tractors	(gal)	$2.86	6.3115	$18.05
REPAIR & MAINTENANCE				
Implements	(acre)	$23.04	1	$23.04
Tractors	(acre)	$3.66	1	$3.66
INTEREST ON OP. CAP.	(acre)	$9.56	1	$9.56
			TOTAL DIRECT EXPENSES	$268.82
			RETURNS ABOVE DIRECT EXPENSES	$434.98
FIXED EXPENSES				
Implements	(acre)	$32.88	1	$32.88
Tractors	(acre)	$27.19	1	$27.19
			TOTAL FIXED EXPENSES	$60.07
			TOTAL SPECIFIED EXPENSES	$328.89
			RETURNS ABOVE TOTAL SPECIFIED EXPENSES	$374.91

Table A3. Estimated Costs and Returns per acre, Faulkner County 2025.

ITEM	UNIT	PRICE	QUANTITY	TOTAL AMOUNT
INCOME				
Bermudagrass mix	(tons)	$138.00	3.1	$427.80
			TOTAL INCOME	$427.80

DIRECT EXPENSES				
FERTILIZER				
28-0-5-6	(lbs)	$0.25	150	$37.50
Potash	(lbs)	$0.25	100	$25.00
HERBICIDE				
Roundup	(oz)	$0.17	32	$5.44
Patriot	(oz)	$3.35	0.33	$1.11
2,4-D	(oz)	$0.17	32	$5.44
INSECTICIDE				
Besiege	(oz)	$1.85	9	$16.65
OTHER				
Net Wrap	(bale)	$1.35	6.93	$9.36
CUSTOM FERT				
Custom Spread (Truck)	(appl)	$9.00	1	$9.00
OPERATOR LABOR				
Tractors	(hour)	$18.69	1.6436	$30.72
HAND LABOR				
Implements	(hour)	$9.06	0.2525	$2.29
DIESEL FUEL				
Tractors	(gal)	$2.86	9.8204	$28.09
REPAIR & MAINTENANCE				
Implements	(acre)	$24.07	1	$24.07
Tractors	(acre)	$6.85	1	$6.85
INTEREST ON OP. CAP.	(acre)	$7.06	1	$7.06
			TOTAL DIRECT EXPENSES	$206.29
			RETURNS ABOVE DIRECT EXPENSES	$221.51

FIXED EXPENSES				
Implements	(acre)	$34.59	1	$34.59
Tractors	(acre)	$51.27	1	$51.27
			TOTAL FIXED EXPENSES	$85.86
			TOTAL SPECIFIED EXPENSES	$292.15
			RETURNS ABOVE TOTAL SPECIFIED EXPENSES	$135.65

Table A4. Estimated Costs and Returns per acre, Grant County 2025.

ITEM	UNIT	PRICE	QUANTITY	TOTAL AMOUNT
INCOME				
Warm Season Mix	(tons)	$138.00	1.9	$262.20
			TOTAL INCOME	$262.20
DIRECT EXPENSES				
FERTILIZER				
Urea	(lbs)	$0.34	137	$46.58
Potash	(lbs)	$0.24	166.3	$39.91
OTHER				
Net Wrap	(bale)	$1.35	4.1	$5.54
ADJUVANTS				
Agri-Dex Crop Oil	(oz)	$0.20	0.08	$0.02
OPERATOR LABOR				
Tractors	(hour)	$18.69	1.0799	$20.18
HAND LABOR				
Implements	(hour)	$9.06	0.0421	$0.38
DIESEL FUEL				
Tractors	(gal)	$2.86	5.8363	$16.69
REPAIR & MAINTENANCE				
Implements	(acre)	$17.04	1	$17.04
Tractors	(acre)	$3.72	1	$3.72
INTEREST ON OP. CAP.	(acre)	$5.17	1	$5.17
			TOTAL DIRECT EXPENSES	$155.21
			RETURNS ABOVE DIRECT EXPENSES	$106.99
FIXED EXPENSES				
Implements	(acres)	$24.62	1	$24.62
Tractors	(acres)	$27.76	1	$27.76
			TOTAL FIXED EXPENSES	$52.38
			TOTAL SPECIFIED EXPENSES	$207.59
			RETURNS ABOVE TOTAL SPECIFIED EXPENSES	$54.61

Table A5. Estimated Costs and Returns per acre, Marion County 2025.

ITEM	UNIT	PRICE	QUANTITY	TOTAL AMOUNT
INCOME				
Bermudagrass mix	(tons)	$138.00	3.4	$469.20
			TOTAL INCOME	$469.20
DIRECT EXPENSES				
FERTILIZER				
Poultry Litter	(tons)	$23.33	4	$93.32
Urea	(lbs)	$0.31	69	$21.39
Potash	(lbs)	$0.25	120	$30.00
HERBICIDE				
Patriot	(oz)	$3.65	0.75	$2.74
OutRider	(oz)	$14.95	1.33	$19.88
OTHER				
Net Wrap	(bale)	$1.35	7.4	$9.99
CUSTOM FERT				
Custom Spread (Truck)	(appl)	$9.00	1	$9.00
OPERATOR LABOR				
Tractors	(hour)	$18.69	1.3703	$25.61
HAND LABOR				
Implements	(hour)	$9.06	0.119	$1.08
DIESEL FUEL				
Tractors	(gal)	$2.86	7.0087	$20.04
REPAIR & MAINTENANCE				
Implements	(acre)	$24.22	1	$24.22
Tractors	(acre)	$3.93	1	$3.93
INTEREST ON OP. CAP.	(acre)	$7.83	1	$7.83
			TOTAL DIRECT EXPENSES	$269.03
			RETURNS ABOVE DIRECT EXPENSES	$200.17
FIXED EXPENSES				
Implements	(acre)	$34.46	1	$34.46
Tractors	(acre)	$29.59	1	$29.59
			TOTAL FIXED EXPENSES	$64.05
			TOTAL SPECIFIED EXPENSES	$333.08
			RETURNS ABOVE TOTAL SPECIFIED EXPENSES	$136.12

Note: Commercial fertilizer prices reported by Stone County are used for the Marion County budget.

Table A6. Estimated Costs and Returns per acre, Pulaski County 2025.

ITEM	UNIT	PRICE	QUANTITY	TOTAL AMOUNT
INCOME				
Warm Season Mix	(tons	$138.00	2.7	$372.60
			TOTAL INCOME	$372.60

DIRECT EXPENSES				
HERBICIDE				
2,4-D	(qt)	$27.00	3	$81.00
OTHER				
Net Wrap	(bale)	$1.35	6.6	$8.91
OPERATOR LABOR				
Tractors	(hour)	$18.69	1.1767	$21.99
HAND LABOR				
Implements	(hour)	$9.06	0.0846	$0.77
DIESEL FUEL				
Tractors	(gal)	$2.86	6.3595	$18.19
REPAIR & MAINTENANCE				
Implements	(acre)	$16.85	1	$16.85
Tractors	(acre)	$4.06	1	$4.06
INTEREST ON OP. CAP.	(acre)	$5.19	1	$5.19
			TOTAL DIRECT EXPENSES	$156.96
			RETURNS ABOVE DIRECT EXPENSES	$215.64

FIXED EXPENSES				
Implements	(acre)	$23.96	1	$23.96
Tractors	(acre)	$30.25	1	$30.25
			TOTAL FIXED EXPENSES	$54.21
			TOTAL SPECIFIED EXPENSES	$211.17
			RETURNS ABOVE TOTAL SPECIFIED EXPENSES	$161.43

Table A7. Estimated Costs and Returns per acre, Stone County 2025.

ITEM	UNIT	PRICE	QUANTITY	TOTAL AMOUNT
INCOME				
Bermudagrass mix	(tons)	$138.00	3.6	$496.80
			TOTAL INCOME	$496.80
DIRECT EXPENSES				
FERTILIZER				
Poultry Litter	(tons)	$45.00	2	$90.00
Potash	(lbs)	$0.25	100	$25.00
Urea	(lbs)	$0.31	108.7	$33.70
HERBICIDE				
Glyphosate	(qt)	$5.76	1	$5.76
Metsulfuron	(oz)	$4.47	0.3	$1.34
OTHER				
Net Wrap	(bale)	$1.35	4.8	$6.48
Twine	(bale)	$0.15	71.9	$10.79
CUSTOM FERT				
Custom Spread (Truck)	(appl)	$9.00	1	$9.00
OPERATOR LABOR				
Tractors	(hour)	$18.69	1.4834	$27.72
HAND LABOR				
Implements	(hour)	$9.06	0.0824	$0.75
DIESEL FUEL				
Tractors	(gal)	$2.86	5.7266	$16.38
REPAIR & MAINTENANCE				
Implements	(acre)	$17.63	1	$17.63
Tractors	(acre)	$2.66	1	$2.66
INTEREST ON OP. CAP.	(acres)	$15.19	1	$15.19
			TOTAL DIRECT EXPENSES	$258.61
			RETURNS ABOVE DIRECT EXPENSES	$238.19
FIXED EXPENSES				
Implements	(acre)	$26.43	1	$26.43
Tractors	(acre)	$20.02	1	$20.02
			TOTAL FIXED EXPENSES	$46.45
			TOTAL SPECIFIED EXPENSES	$305.06
			RETURNS ABOVE TOTAL SPECIFIED EXPENSES	$191.74

Notes

Notes

DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

United States Department of Agriculture, University of Arkansas, and County Governments Cooperating

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