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## BLUESTEM PASTURE RELEASE 2023



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The 2023 results on bluestem pasture leases utilize the responses from the 2023 Kansas Bluestem Pasture Survey conducted from February through May of 2023 over the 14 Bluestem counties.<sup>1</sup> The format of the Kansas Bluestem surveys was changed in 2019, in response to requests to change the question format to better reflect native tallgrass prairie use and leasing practices. The new survey instrument incorporated suggestions from a focus group of report users that included landowners, livestock owners, livestock care providers, and Flint Hills extension agents. Because of the format change, discussions on leasing rates are not directly comparable to years prior to 2019. Please refer to previous Bluestem releases for historical leasing rates.

The 14 Bluestem counties surveyed include: Geary, Pottawatomie, Wabaunsee, Chase, Lyon, Morris, Marion, Butler, Chautauqua, Cowley, Elk, Coffey, Greenwood, and Woodson. Lease types discussed include short summer season leases,  $\frac{3}{4}$  summer season leases, full summer season leases, winter grazing leases, and full year leases. The grazing period of short summer season leases lasts about 90 days; a  $\frac{3}{4}$  summer season contract has a grazing period of about 120 days; and the grazing season is typically around 180 days for a full summer season lease. About 40% of the survey respondents are landowners; 27% of the respondents are livestock owners; 15% of the respondents are livestock care providers, and 17% of the respondents are land managers.

In 2023, the condition of bluestem pasture in the Flint Hills region of Kansas was rated as 5.4 percent very poor, 23.7 percent poor, 32.8 percent adequate, 30.4 percent good, and 7.6 percent excellent. In 2021, the condition of Bluestem pasture in the Flint Hills region of Kansas was rated as 1.4 percent very poor, 10.5 percent poor, 35.6 percent adequate, 40.1 percent good, and 12.3 percent excellent. The 2023 results indicate that the Bluestem counties received relatively adequate rainfall. However, responses indicate that pasture conditions in 2023 are not as good as they were in 2021 and 2019, which were worse than the conditions in 2017.

Responses to the sources of **water** being used for livestock on bluestem pasture were distributed in the following manner: ponds, 43.9 percent; streams or spring-fed or spring development, 25.3 percent; rural water, 8.1 percent; wells, 6.6 percent; solar powered, 5.6 percent; windmill, 5.1 percent; electric-powered wells, 3.5 percent; and hauling, 2.0 percent. The distribution of water sources in 2023 was similar to the distribution in 2021. Ponds remained the top water source, down 2.6 percent from 2021. Streams or spring-fed, the second most prominent source, increased by 0.3 percent from 2021. Rural water as a supply source increased from 5.4 percent in 2021 to 8.1 percent in 2023. Solar powered supply sources decreased from 6.9 percent in 2021 to 5.6 percent in 2023. Kansas stock water supplies are no longer reported by USDA, as of 2018.

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<sup>1</sup> For questions and comments, please contact Tori Laird ([Tori.Laird@ks.gov](mailto:Tori.Laird@ks.gov)) and Leah Tsoodle ([Ltsoodle@ksu.edu](mailto:Ltsoodle@ksu.edu)).

About 74.5 percent of the respondents reported **burning** their tallgrass pastures in 2023. Most of the burning took place between April 1<sup>st</sup> and April 15<sup>th</sup>. About 96.8 percent of **available pasture** was **reported to be under contract** in the 2022-2023 season. For the different lease durations, 23.9 percent of the respondents had short summer leases; 19.0 percent had full year leases, and 36.8 percent had full summer season leases (Table 1). About 12.9 percent and 7.4 percent had  $\frac{3}{4}$  summer season and winter grazing leases, respectively. Of the **acres** that respondents had contracted, 27.1 percent were under full summer season contracts; 44.2 percent were under short summer season contract for early intensive grazing; 11.9 percent were under  $\frac{3}{4}$  summer season contracts; 15.7 percent were leased for the full year; and only 1.2 percent of respondents leased for winter grazing. The average number of acres leased ranged from 238 for winter grazing leases to 2785 acres for short summer season leases. The number of acres for full summer season leases averaged 1110 in 2023.

The **start date** of the grazing season for most of the full summer season contracts was May 1, and the mode ending date was November 1. The mode starting date for short summer season or intensive grazing was also May 1, and the mode ending date was August 1. Most of  $\frac{3}{4}$  summer season contracts start May 1 and end around September 1. Winter grazing leases often start around November 1 and last for about six months.

The number of years a tallgrass lease has been in place varies (Table 2). About 59 percent of the tallgrass native pasture leases have been in place for 10 or less years. About 10 percent of the leases have been in place for only 1 year. About 28 percent of the leases have been in place for 20 or more years. About 68 percent of bluestem pasture leases were written contracts in 2023; this increased by 16 percent from the 52 percent in 2021. Thirty-two percent of the leases were oral leases in 2023.

The term “with care” has a wide range of meanings across leases in the 14 Bluestem counties. Therefore, the new survey format attempted to more clearly define that term. The 2023 survey format, started in 2019, allowed respondents to select from 13 specific categories and one “other” category of care services that may be included in the lease rate. About 32.4 percent of the reported rental rates for a 600-pound steer/heifer base animal included at least 1 care service listed in the table. Twenty-four percent of the reported rental rates for a 1250-pound cow/calf pair included care services. Care services included in contracts with cares varied by lease types and by respondents. The care services and related response percentages are shown in Table 3.

**Fence** maintenance was provided by most of the respondents when care was provided. **Fence** maintenance was included in 100 percent of all 600-pound steer/heifer **full summer** season leases with care. Services provided by the landlord or caretaker in **600-pound** steer/heifer full summer season leasing arrangements were: grass management including weed & tree control, 87 percent; burning, distributing salt & mineral, riding/checking cattle, and gathering cattle, 80 percent each; doctoring, 67 percent; providing medicine, liability insurance coverage, and providing salt & mineral, 40 percent each; providing herbicide and herbicide application, 33 percent and 47 percent, respectively; guaranteed count, 13 percent; and other miscellaneous services, 13 percent. About 93 percent of all **1250-pound** cow-calf **full summer** leases with care included fence maintenance. Riding/checking cattle was included in 86 percent of 1250-pound full summer leases. Grass management and gathering cattle were included in 79 percent of 1250-pound full summer leases, followed by distributing salt & mineral, burning, doctoring, and herbicide application (Table 3).

**Fence** maintenance and distributing salt and mineral were the services provided most often by the landlord or caretaker in **short summer** season leasing arrangements, 94 percent for **600-pound** steer/heifer leases. About 88 percent of all 600-pound steer/heifer short summer leases with care included burning, doctoring, grass management, riding/checking cattle, and gathering cattle. Other services included in **600-pound** steer/heifer leases were: liability insurance coverage, 41 percent; providing herbicide, 18 percent; herbicide application, 29 percent; providing medicine and providing salt & mineral, 23 percent each; and guaranteed

count, 35 percent. There were too few responses for care services included in **1250**-pound cow/calf short summer leases to be reported (Table 3).

All **600**-pound steer/heifer  $\frac{3}{4}$  **summer** lease responses with care arrangements included burning, fence maintenance, and riding/checking cattle services. Eighty-nine percent of those lease respondents indicated services that included doctoring, grass management, and distributing salt and mineral. Sixty-seven percent provided cattle gathering service. Thirty-three percent provided care services including herbicide application, liability insurance coverage, and providing salt & mineral. Guaranteed count was included in 22 percent of 600-pound  $\frac{3}{4}$  summer leases. Eleven percent provided care services including providing medicine and providing herbicide (Table 3).

**Fence** maintenance, riding/checking cattle, and gathering cattle were provided in 100 percent of the **full year** contracts with care for both 600-pound steer/heifer and 1250-pound cow/calf pair. Other services included in **600**-pound steer/heifer leases were: burning, doctoring, and distributing salt and mineral, 92 percent each; grass management, 75 percent; providing medicine, liability insurance coverage, and providing salt & mineral, 58 percent each; providing herbicide, 50 percent; herbicide application, 42 percent; and guaranteed count, 25 percent. Regarding **1250**-pound cow/calf full year leases with care, 89 percent included doctoring and distributing salt and mineral services. Burning and grass management were included in 78 percent of all leases. Forty-four percent provided liability insurance coverage. Thirty-three percent of lease respondents, with full year contracts, reported services including providing medicine, providing herbicide, and providing salt & mineral. Twenty-two percent provided herbicide application and guaranteed count (Table 3).

The average lease rates for the various care services are shown in Tables 4a, 4b, and 4c. To be included in the average, the lease rates had to be associated with the exact same care services. In these tables, B represents burning, and D represents doctoring. M indicates that the care giver administers medicine. F and L indicate that the care provider maintains the fence and an insurance liability policy, respectively. G represents grass management, providing herbicide, and applying herbicide. Sd and Sp indicate that the care provider distributes salt and provides salt, respectively. Finally, C indicates a guaranteed count, R represents riding the cattle, and Gc indicates gathering the cattle.

For a **base animal** of 600 pounds, 5.6 **acres were allowed** in a full summer season lease (Table 5a). The average number of acres allowed for a typical 600-pound animal was 3.1 acres in a short summer season contract. In a  $\frac{3}{4}$  summer season lease, 4.0 acres were allowed. An average of 7.4 acres was allowed in a full year lease. In a winter grazing lease, 9.9 acres were allowed for a 600-pound animal.

For a full summer season contract, the average tallgrass native pasture **lease rate** for a 600-pound **steer/heifer** was reported to be \$136.33 per head where care is provided and \$121.88 per head where care is not provided (Table 5a). The average lease rate for this 600-pound steer/heifer in a short summer lease was \$101.08 per head where care is provided and \$90.17 per head when care is not provided. The lease rate for a  $\frac{3}{4}$  summer lease averaged \$121.29 per head with care. All these rates, except for full summer season contracts with care, were higher than the rates in 2021. The average lease rate in a full year contract averaged \$143.95 per head with care.

The average price **per acre** for a 600-pound **steer/heifer** in a full summer season contract was \$30.50 where care is provided and \$26.27 where care is not provided (Table 5b). In a short summer lease, the average rate was \$42.80 per acre where care is provided and \$29.58 per acre where care is not provided. For a  $\frac{3}{4}$  summer season contract, price per acre with care wasn't reported, and the price per acre without care averaged \$28.83. The rate for a full year lease averaged \$25.90/acre where care is provided and \$27.27/acre where care is not provided. The average lease rate per acre for winter grazing without care was \$22.67.

For a **base pair, defined** as a spring calving cow of 1250 pounds with her calf, 8.6 **acres were allowed** in a full summer season lease (Table 6a). Acres allowed for a typical 1250-pound cow/calf pair was 4.8 acres in a short summer season contract. In a  $\frac{3}{4}$  summer season lease, 6.0 acres were allowed. An average of 11.5 acres was allowed in a full year lease. In a winter grazing lease, 6.3 acres were allowed for a 1250-pound pair.

For a full summer season contract, the average **price** for a 1250-pound **cow/calf** pair was \$259.75 per pair where care is provided and \$232.29 per pair where care is not provided (Table 6a). If care is provided, the average lease price for 1250-pound cow/calf pair in a full year contract was reported to be \$193.75 per pair.

For a 1250-pound **cow/calf** pair, the average lease price **per acre** in a full summer contract averaged \$35.00 per acre where care is provided and \$28.41 where care is not provided (Table 6b). For a full year lease, the average lease price was \$24.30 per acre where care is provided and \$26.00 per acre where care is not provided. The average per acre lease rate for a 1250-pound cow/calf pair in a short summer contract and a  $\frac{3}{4}$  summer season contract without care was \$33.33 per acre and \$28.40 per acre, respectively. The average leasing rate in a winter grazing only contract where care is not provided was \$19.13 per acre.

In the bluestem region, steel posts and combined steel & wood posts were the most common posts for **fences**. About 39 percent of fences used steel & wood posts, and 61 percent used all steel posts. Treated wood and hedge posts were not reported. About 77 percent of fences used five barbed wires, and 13 percent used 4 barbed wires. The average rate charged for building a five-wire fence was more expensive in 2023 than in 2021. If material is included, the rate for building a 5-wire fence with steel and wood posts was \$20,067 per mile (\$62.71 per rod) (Table 7a & 7b). The rate charged for building a five-wire all steel post fence, including materials, averaged \$15,518 per mile (\$48.49 per rod). The hourly rate for building fences with equipment furnished by contractor averaged \$49 per hour (Table 9). Additional charges for gates and corners averaged \$162.94 and \$218.45, respectively (Table 8). The additional charge for building in rough or rocky terrain was \$56.25 per hour or \$1.60 per foot (Table 9).

**Table 1. Reported Bluestem Leases by Lease Types**

Lease Type	Acres under Various Types of Contract			
	Percent of Respondents (%)	Percent of Total Reported Acres (%)	Average Size (Acres)	Range (Acres)
Short Summer Season	23.93	44.20	2785	40 - 18000
3/4 Summer Season	12.88	11.89	1391	120 - 7000
Full Summer Season	36.81	27.10	1110	60 - 8000
Full Year	19.02	15.65	1241	100 - 8000
Winter Grazing	7.36	1.16	238	20 - 900

**Table 2. Characteristics of Reported Bluestem Leases**

	Number of Years Lease has been in Place								Lease Type	
	1	2	3	4	5	6-10	11-19	20 or More	Oral	Written
Percentage	9.7%	6.0%	9.0%	2.2%	8.2%	23.9%	13.4%	27.6%	31.7%	68.3%

**Table 3. Care Services Percentage of Total Respondents by Lease Types**

	Percentage of Care (%)					
	600-Pound Steer/Heifer				1250-Pound Cow/Calf	
	Full Summer Season	Short Summer Season	3/4 Summer Season	Full Year	Full Summer Season	Full Year
Burning	80.00	88.24	100.00	91.67	64.29	77.78
Doctoring	66.67	88.24	88.89	91.67	64.29	88.89
Providing Medicine	40.00	23.53	11.11	58.33	28.57	33.33
Fence Maintenance	100.00	94.12	100.00	100.00	92.86	100.00
Grass Management	86.67	88.24	88.89	75.00	78.57	77.78
Providing Herbicide	33.33	17.65	11.11	50.00	57.14	33.33
Herbicide Application	46.67	29.41	33.33	41.67	64.29	22.22
Liability Insurance coverage	40.00	41.18	33.33	58.33	42.86	44.44
Distributing Salt & Mineral	80.00	94.12	88.89	91.67	71.43	88.89
Providing Salt & Mineral	40.00	23.53	33.33	58.33	50.00	33.33
Guaranteed Count	13.33	35.29	22.22	25.00	21.43	22.22
Riding/Checking Cattle	80.00	88.24	100.00	100.00	85.71	100.00
Gather Cattle	80.00	88.24	66.67	100.00	78.57	100.00
Other	13.33	0.00	0.00	0.00	0.00	0.00

**Table 4a. Care Services Average Lease Rates by Lease Types: Full Summer Season Lease**

Care Services	Average <b>Full Summer</b> Lease Rates			
	600 lb.		1250 lb.	
	\$/Head	\$/Acre	\$/Head	\$/Acre
BDMFGLSdSpCRGc	-	-	-	50.00
DMFGLSdSpCRGc	-	-	145.00	-
BDMFGSdSpRGc	-	20.00	-	-
BFGLSdSpRGc	120.00	-	300.00	-
DMFGSdSpRGc	-	-	178.00	-
BDFGLSdRGc	-	-	330.00	-
BDFGSpCRGc	-	-	225.00	-
BDMFGSdRGc	-	35.00	-	-
BFGSdSpRGc	-	-	300.00	-
BDFGSdRGc	115.00	-	-	18.00
BDFSdCRGc	180.00	30.00	-	-
BDFGLSdR	-	-	350.00	-
FGRGc	100.00	-	250.00	-
BFGL	-	37.00	-	37.00
MFG	188.00	-	-	-

- No Response.

**Table 4b. Care Services Average Lease Rates by Lease Types: Full Year Lease**

Care Services	Average Full Year Lease Rates			
	600 lb.		1250 lb.	
	\$/Head	\$/Acre	\$/Head	\$/Acre
BDMFGLSdSpCRGc	-	-	-	50.00
DMFGLSdSpCRGc	-	-	145.00	-
BDMFGSdSpRGc	-	20.00	-	-
BFGLSdSpRGc	120.00	-	300.00	-
DMFGSdSpRGc	-	-	178.00	-
BDFGLSdRGc	-	-	330.00	-
BDFGSpCRGc	-	-	225.00	-
BDMFGSdRGc	-	35.00	-	-
BFGSdSpRGc	-	-	300.00	-
BDFGSdRGc	115.00	-	-	18.00
BDFSdCRGc	180.00	30.00	-	-
BDFGLSdR	-	-	350.00	-
FGRGc	100.00	-	250.00	-
BFGL	-	37.00	-	37.00
MFG	188.00	-	-	-

- No Response.

**Table 4c. Care Services Average Lease Rates by Lease Types: Short Summer & ¾ Summer**

Care Services	600-Pound Steer/Heifer			
	Short Summer Season		¾ Summer Season	
	\$/Head	\$/Acre	\$/Head	\$/Acre
BDMFGLSdSpCRGc	100.00	-	-	-
BDMFGSdSpGc	80.00	-	-	-
BFGLSdSpRGc	90.00	-	105.00	-
BDFGLSdRGc	105.00	-	129.00	-
BDFGSdCRGc	105.00	-	-	-
BDMFGSdRGc	-	50.00	-	-
DFGLSdCRGc	98.00	86.00	-	-
BDFGSdRGc	135.00	-	143.76	-
BDFSdCRGc	90.00	30.00	-	-
BDFGLSdR	110.00	-	-	-
BDFGSdR	-	-	85.00	-
BDFSdCR	-	-	120.00	30.00
FG	-	28.00	-	-

- No Response.

**Table 5a. Average Bluestem Pasture Lease Rates per Head (\$/Head): 600-Pound Steer/Heifer**

Lease Type	Average Lease Price per Head (\$/Head)				Acres Allowed (Acres)
	Without Care		With Care		
	Average	Range	Average	Range	
Short Summer Season	90.17	78 - 108	101.08	60 - 150	3.1
3/4 Summer Season	1/	1/	121.29	85 - 191	4.0
Full Summer Season	121.88	75 - 175	136.33	65 - 188	5.6
Full Year	-	-	143.95	60 - 245	7.4
Winter Grazing	1/	1/	-	-	9.9

- No Response.

1/ Insufficient reports to publish.

**Table 5b. Average Bluestem Pasture Lease Rates per Acre (\$/Acre): 600-Pound Steer/Heifer**

Lease Type	Average Lease Price per Acre (\$/Acre)			
	Without Care		With Care	
	Average	Range	Average	Range
Short Summer Season	29.58	25 - 35	42.80	20 - 86
3/4 Summer Season	28.83	21 - 40	1/	1/
Full Summer Season	26.27	9 - 40	30.50	20 - 37
Full Year	27.27	19.89 - 33	25.90	17 - 40
Winter Grazing	22.67	10 - 30	-	-

- No response.

1/ Insufficient reports to publish.

**Table 6a. Average Bluestem Pasture Lease Rates per Head (\$/Head): 1250-Pound Cow/Calf**

Lease Type	Average Lease Price per Head (\$/Head)				Acres Allowed (Acres)
	Without Care		With Care		
	Average	Range	Average	Range	
Short Summer Season	-	-	-	-	4.8
3/4 Summer Season	-	-	-	-	6.0
Full Summer Season	232.29	100 - 400	259.75	145 - 350	8.6
Full Year	1/	1/	193.75	60 - 250	11.5
Winter Grazing	-	-	1/	1/	6.3

- No Response.

1/ Insufficient reports to publish.

**Table 6b. Average Bluestem Pasture Lease Rates per Acre (\$/Acre): 1250-Pound Cow/Calf**

Lease Type	Average Lease Price per Acre (\$/Acre)			
	Without Care		With Care	
	Average	Range	Average	Range
Short Summer Season	33.33	30 - 40	1/	1/
3/4 Summer Season	28.40	21 - 35	-	-
Full Summer Season	28.41	8.5 - 40	35.00	18 - 50
Full Year	26.00	20 - 29	24.30	17 - 35
Winter Grazing	19.13	8.5 - 30	-	-

-No Response.

1/ Insufficient reports to publish.

**Table 7a. Bluestem Pasture Custom Fence Building Rates in Miles, by Post Types**

Post Type	5 Wire Including Materials (\$/Mile)		5 Wire Excluding Materials (\$/Mile)	
	Average	Range	Average	Range
Steel Post Only	15,518	5,000-33,000	1/	1/
Steel & Wood Posts	20,067	9,000-40,000	1/	1/
Combined Rate	17,337	5,000-40,000	6,696	3,168-9,000

1/ Insufficient reports to publish.

**Table 7b. Bluestem Pasture Custom Fence Building Rates in Rods, by Post Types**

Post Type	5 Wire Including Materials (\$/Rod)		5 Wire Excluding Materials (\$/Rod)	
	Average	Range	Average	Range
Steel Post Only	48.49	15.63-103.01	1/	1/
Steel & Wood Posts	62.71	28.13-125.00	1/	1/
Combined Rate	54.18	15.63-125.00	20.93	9.90-28.13

1/ Insufficient reports to publish.

**Table 8. Bluestem Pasture Custom Fence Building Charges for Gates**

Gate Type	Additional Charge for Gates (\$/Gate)		Number of Gates	
	Average	Range	Average	Range
Steel Gates	205.83	40-400	2.33	1-6
Wire Gates	60.00	20-100	2.00	2-3
Combined Rate	162.94	20-400	2.41	1-6



**Table 9. Additional Charges for Bluestem Pasture Custom Fence Building**

		Average	Range
Additional Charge for Corners	(\$)	\$ 218.45	\$ 50-500
Average Hourly Rate for Rough or Rocky Terrain	(\$/Hour)	\$ 56.25	\$ 45-80
	(\$/Feet)	\$ 1.60	\$ 1.00-4.17
Average Hourly Rate with Equipment	(\$/Hour)	\$ 49.00	\$ 30-60
	Number of Laborers	1.80	1-2

**Kansas Bluestem Pasture - 14 County Area**

