

Flint Hills Wildland Fire Update

2025 Summary
June 26, 2025



<https://www.KSFire.org/>

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This website was developed as part of the development of the Kansas Flint Hills Smoke Management Plan. Kansas State University hosts the webpage, and it includes important information for ranchers and others who might be interested in the Flint Hills. It provides training, regulations, policies, publications, a modeling tool and other links to guide people looking for information on smoke management. The development of the Flint Hills Smoke Management Plan is an attempt to balance the need for prescribed fire in the Flint Hills with the need for clean air in downwind areas.

Acreage Burned Analysis

Analysis was conducted during the period of March 5 to May 4, 2025, to determine the approximate total of acres burned within the Flint Hills region. The analysis conducted does not differentiate between prescribed fire and wildfire which is important to note, especially when wildfires are common. While prior year periods of analysis differ in date range the analysis always encompasses a clear majority of the Spring burn period within the Flint Hills.

If you have questions, or for more information, contact:

Douglas Watson

Director

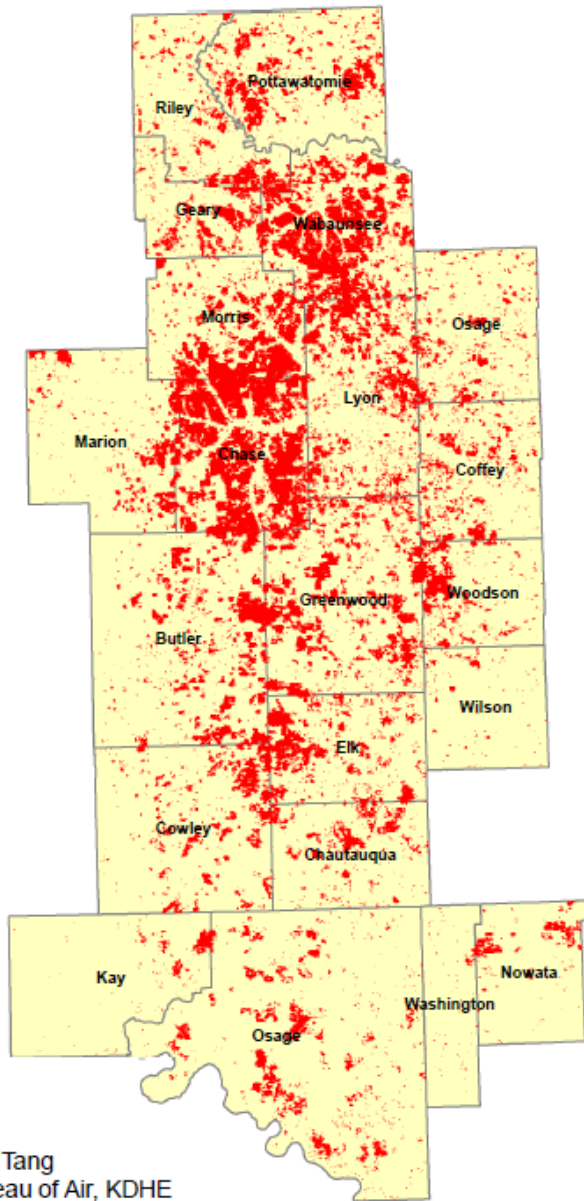
Bureau of Air

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Flint Hills Acreage Burned (March 5 – May 4, 2025)



Yao Tang
Bureau of Air, KDHE

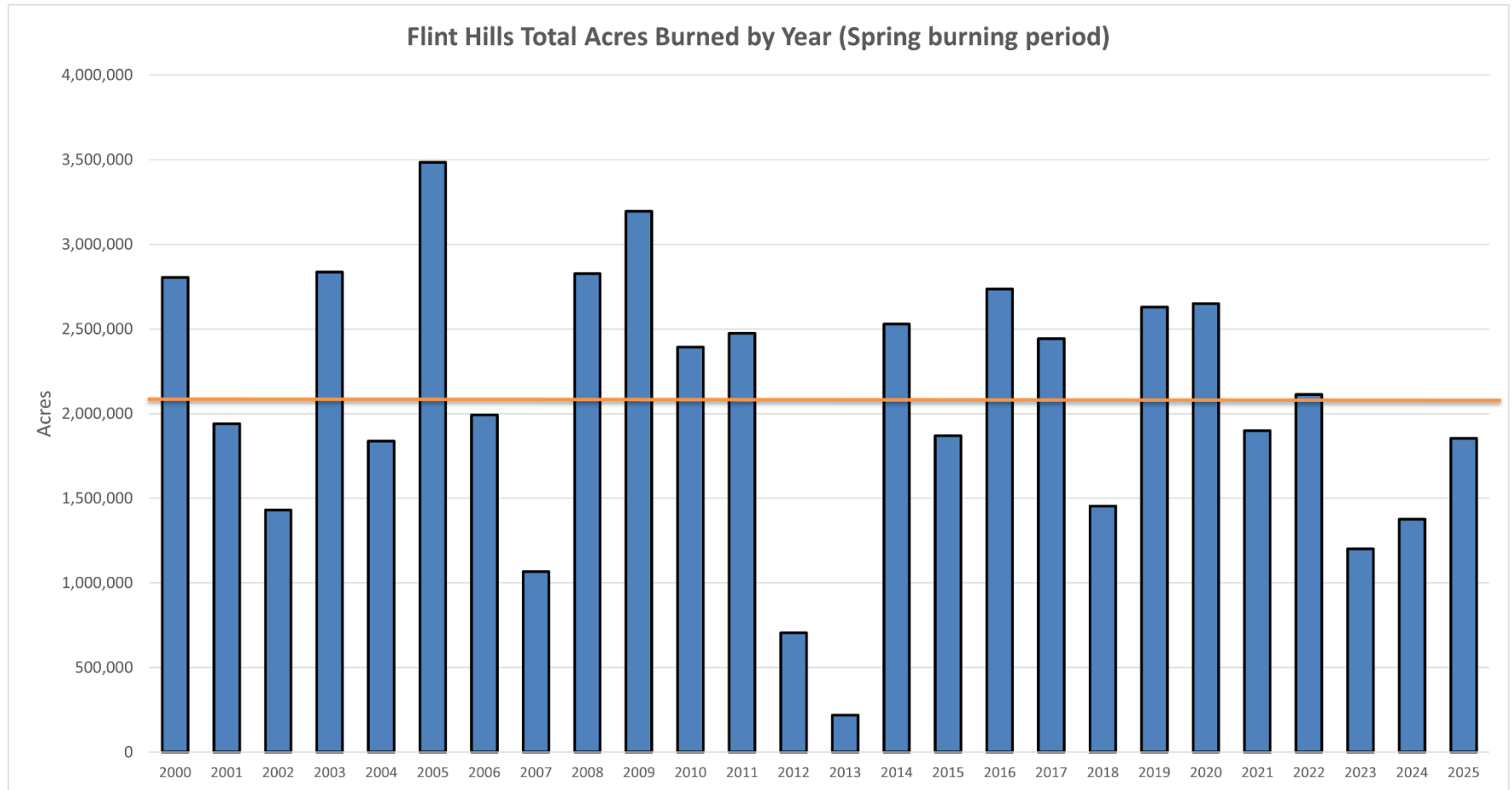
<u>Counties</u>	<u>Acres Burned</u>
Butler	131,849
Chase	297,196
Chautauqua	44,804
Coffey	56,465
Cowley	76,604
Elk	84,604
Geary	51,800
Greenwood	170,506
Lyon	135,292
Marion	53,577
Morris	136,466
Osage (KS)	44,372
Pottawatomie	93,948
Riley	57,329
Wabaunsee	220,638
Wilson	8,108
Woodson	49,391
Nowata (OK)	22,441
Osage (OK)	101,392
Washington (OK)	3,212
Kay (OK)	13,699
Total	1,853,693

Flint Hills Total Acres Burned by Year (Spring burn period)

Year	Acres Burned
2000	2,802,963
2001	1,939,859
2002	1,429,438
2003	2,835,778
2004	1,837,021
2005	3,483,101
2006	1,992,477
2007	1,066,809
2008	2,825,876
2009	3,195,053
2010	2,392,693
2011	2,473,423
2012	706,016
2013	217,377
2014	2,529,468
2015	1,870,018
2016	2,736,791
2017	2,441,355
2018	1,453,748
2019	2,627,737
2020	2,649,203
2021	1,899,225
2022	2,112,759
2023	1,200,613
2024	1,376,693
2025	1,853,693
Average	2,074,969

2025 Flint Hills acres burned by county compared to 10-year average

County	2025	10-year Average	% of Average
Butler	131,849	163,537	81%
Chase	297,196	253,028	117%
Chautauqua	44,804	62,032	72%
Coffey	56,465	59,466	95%
Cowley	76,604	100,015	77%
Elk	84,604	102,859	82%
Geary	51,800	41,522	125%
Greenwood	170,506	224,243	76%
Lyon	135,292	133,805	101%
Marion	53,577	46,452	115%
Morris	136,466	105,513	129%
Osage (KS)	44,372	57,161	78%
Pottawatomie	93,948	85,766	110%
Riley	57,329	54,670	105%
Wabaunsee	220,638	179,516	123%
Wilson	8,108	22,168	37%
Woodson	49,391	58,511	84%
Nowata (OK)	22,441	41,037	55%
Osage (OK)	101,392	194,845	52%
Washington (OK)	3,212	25,519	13%
Kay (OK)	13,699	23,517	58%
Total Acres	1,853,693	2,035,182	91%



County	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Butler	13,097	166,442	94,349	245,921	220,221	93,964	240,021	237,628	145,393	163,895	52,418	104,064	131,849
Chase	5,174	288,529	218,860	318,679	273,258	72,449	332,950	343,359	314,833	237,442	238,693	101,423	297,196
Chautauqua	3,985	113,499	71,321	94,473	59,353	87,214	110,366	73,515	56,171	57,901	7,645	28,881	44,804
Coffey	11,166	77,298	81,978	76,450	84,697	50,565	75,029	61,330	55,028	85,902	26,178	23,012	56,465
Cowley	3,907	92,804	61,036	158,984	99,786	52,758	186,383	149,254	57,422	88,095	13,112	117,748	76,604
Elk	8,680	167,647	92,990	171,757	126,613	89,809	157,594	139,926	84,975	109,933	14,301	49,082	84,604
Geary	6,039	47,769	15,583	51,492	62,195	10,965	39,013	70,998	34,889	17,035	38,147	38,688	51,800
Greenwood	18,873	250,042	247,741	284,624	351,467	148,328	311,482	296,671	219,155	315,605	54,704	89,885	170,506
Lyon	14,471	143,075	156,975	174,213	151,865	86,242	135,138	159,231	115,879	180,190	115,091	84,913	135,292
Marion	3,228	44,402	28,124	75,647	68,357	7,043	52,526	83,909	40,711	37,483	16,047	29,221	53,577
Morris	2,162	107,600	64,433	149,780	118,721	61,376	110,860	147,293	78,288	96,126	81,268	74,952	136,466
Osage (KS)	10,008	77,901	66,070	64,974	67,229	72,928	50,055	61,870	45,144	83,894	51,167	29,978	44,372
Pottawatomie	5,961	120,882	63,229	89,114	125,671	39,182	83,245	139,385	77,361	59,106	94,597	56,048	93,948
Riley	36,201	84,032	50,039	64,110	63,723	32,325	57,407	74,395	41,561	53,700	56,326	45,823	57,329
Wabaunsee	23,552	240,173	102,349	199,804	194,954	83,832	189,363	231,820	169,966	182,259	196,421	126,103	220,638
Wilson	8,417	33,236	22,688	23,136	31,090	31,970	31,136	22,997	16,093	33,592	9,653	13,900	8,108
Woodson	12,124	82,271	82,596	79,276	100,759	47,878	83,647	70,890	53,762	69,422	6,162	23,923	49,391
Nowata (OK)	4,834	68,217	64,773	48,186	25,051	73,036	66,967	51,970	33,344	43,507	1,961	43,908	22,441
Osage (OK)	22,147	275,278	206,504	301,258	173,703	248,824	241,457	181,549	197,565	156,297	111,478	234,924	101,392
Washington (OK)	3,351	48,371	45,669	32,387	14,904	45,515	37,298	27,182	31,877	30,842	2,595	29,375	3,212
Kay (OK)	----	----	32,711	32,526	27,738	17,545	35,800	24,031	29,808	10,533	12,649	30,842	13,699
Total Acres	217,377	2,529,468	1,870,018	2,736,791	2,441,355	1,453,748	2,627,737	2,649,203	1,899,225	2,112,759	1,200,613	1,376,693	1,853,693

Air Quality Data

Air quality data for the period of March 5 – May 4, 2025, was utilized to estimate the number of exceedances to the daily National Ambient Air Quality Standard (NAAQS) for two pollutants that are commonly impacted by wildland fire smoke, ozone, and fine inhalable particulate matter – often referred to as PM_{2.5}. The NAAQS for ozone is a daily 8-hour maximum of 70 parts per billion (ppb) and for PM_{2.5} is a daily 24-hour average maximum of 35 micrograms per cubic meter (µg/m³). All air quality data is considered preliminary and only data from state-operated regulatory monitors was utilized. The exceedances listed below are likely to have been influenced by wildland fires within the Flint Hills, but it is important to note that regional pollutants, pollutant emissions from other sources, and wildland fire smoke from beyond the Flint Hills – prescribed fire or otherwise – are also likely to have also influenced the air quality monitor and the preliminarily measured value.

There was a total of 4 preliminary exceedances identified, which occurred in two states (Kansas and Oklahoma). This includes one ozone exceedance and three PM_{2.5} exceedances, all of which are listed in the table below.

Date	Location	Pollutant	Preliminary Measured Value
March 26	Peck, KS (Wichita Metro)	PM _{2.5}	39 µg/m ³
March 26	Ponca City, OK	PM _{2.5}	38.5 µg/m ³
April 9	Chanute, KS	Ozone	73 ppb
April 16	Topeka, KS	PM _{2.5}	44.7 µg/m ³