

Kansas Agricultural Experiment Station Research Reports

Volume 4
Issue 8 *Southwest Research-Extension Center
Reports*

Article 2

2018

Weather Information for Garden City, 2017

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Recommended Citation

Elliott, J. (2018) "Weather Information for Garden City, 2017," *Kansas Agricultural Experiment Station Research Reports*: Vol. 4: Iss. 8. <https://doi.org/10.4148/2378-5977.7622>

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Weather Information for Garden City, 2017

Abstract

Summary of weather for research conducted at the Garden City field location.

Keywords

Garden City weather, 2018 weather, southwest Kansas weather report

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Weather Information for Garden City, 2017

J. Elliott

Precipitation for 2017 totaled 20.37 in. This was 1.13 in. above the 30-year average of 19.24 in. and followed a year of below normal moisture. Excellent moisture in March and April resulted in favorable spring planting conditions. May through July precipitation was diminished to about half of the 30-year-average. September recorded 3.29 in. and resulted in good conditions for early planted wheat. Blowing dust occurred on March 7 and October 27. Quarter sized hail and damaging wind were noted on October 7. The largest precipitation events were 2.93 in. (11 in. of heavy, wet snow) on March 29 through May 2, and 3.00 in. rain on September 24 through 26.

Measurable snowfall occurred in January, April, and May. Annual snowfall totaled 17.0 in. compared to an average of 19.7 inches. Seasonal snowfall (2016-2017) was 18.5 in.

Average daily wind speed was 4.86 mph compared to the 30-year average of 5.10 mph. Open pan evaporation was measured daily from April through October, and totaled 77.77 in. This was 7.51 in. above the 30-year mean of 70.26 in.

Our mean annual temperature was 55.8°F which was 2.1°F above the 30-year average of 53.7°F. Triple-digit temperatures were observed on 17 days in 2017, with the highest being 105°F on June 12 and July 22. Twelve record high temperatures were equaled or exceeded in 2017: 88°F on February 11, 76°F on February 20, 80°F on February 22, 94°F on March 20, 85°F on March 24, 92°F on April 20, 94°F on May 16, 98°F on September 15, 96°F on September 23, 79°F on November 18, 76°F on November 28, and 74°F on December 4. The highest temperature recorded for the month of March was 94°F on March 20.

Sub-zero temperature occurred once in 2017. The lowest temperature was -8°F noted on January 7. Two record low temperatures were equaled or exceeded: 42 on September 6, and 16 on October 18.

The last spring freeze was 32°F on May 4, which was five days later than the 30-year average. The first fall freeze was 31°F on October 15, which was three days later than normal. This resulted in a 164-day frost-free period, which is one day shorter than the 30-year average.

The 2017 climate information for Garden City is summarized in Table 1.

Table 1. Climate data, Southwest Research-Extension Center, Garden City

Month	Precipitation		Monthly temperatures						Wind		Evaporation	
	2017	Avg.	2017			2017 extreme			2017	30-year avg.	2017	30-year avg.
			Max	Min	Mean	30-year avg.	Max	Min				
	-----in.-----		----- °F -----						---- mph ----		-----in.-----	
January	1.54	0.46	43.5	19.7	31.6	30.4	72	-8	3.39	4.50	--	--
February	0.00	0.55	61.4	23.3	42.3	33.9	88	6	4.36	5.24	--	--
March	2.55	1.31	66.2	29.5	47.8	42.9	94	10	5.95	6.31	--	--
April	4.03	1.74	67.5	41.1	54.3	52.3	92	29	6.88	6.42	7.35	8.21
May	1.47	2.98	75.5	45.3	60.4	62.8	95	31	6.35	5.76	10.22	10.04
June	1.25	3.12	92.2	60.6	76.4	72.6	105	53	5.73	5.37	15.83	11.96
July	2.02	2.80	93.8	65.8	79.8	77.9	105	55	4.30	4.59	14.47	13.22
August	2.46	2.51	86.8	59.4	73.1	76.3	97	50	3.29	4.11	11.16	11.28
September	3.29	1.42	84.8	54.6	69.7	67.7	98	42	4.98	4.73	12.14	9.22
October	1.75	1.21	73.1	40.1	56.6	54.9	90	16	4.94	4.89	6.60	6.33
November	0.01	0.55	60.2	29.7	44.9	41.6	79	18	4.19	4.80	--	--
December	0.00	0.59	49.0	16.2	32.6	31.4	74	3	4.01	4.45	--	--
Annual	20.37	19.24	71.1	40.4	55.8	53.7	105	-8	4.86	5.10	77.77	70.26

Normal latest spring freeze (32°F): April 29. In 2017: May 4.

Normal earliest fall freeze (32°F): October 12. In 2017: October 15.

Normal frost-free period (>32°F): 165 days. In 2017: 164 days.

30-year averages are for the period 1981-2010. All recordings were taken at 8:00 a.m.