

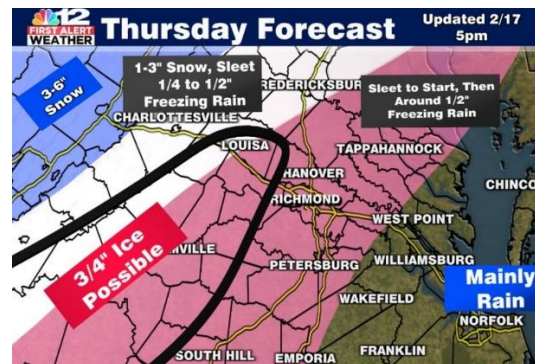
2021 WEATHER SUMMARY

West Henrico Co. Springfield
Park, Glen Allen, VA

No Major Weather Events

The closest to a major weather event was the Ice storm of February 18th and 19th. This was the forecast on the 17th. Three fourth inches of ice can cause much damage and a great amount of power outages. But locally we had between 0.2 and 0.3 inches of ice, over 0.5 inches of sleet and very few power outages.

If you arranged the roadside tree debris from February's ice storm in a path one yard high and one yard wide, it could theoretically line Interstate 64 for 261 miles from Hampton to the West Virginia border. That's just what the Virginia Department of Transportation removed from interstates and primary and secondary roads in the 14-county Richmond District. Contractors completed the removal of 460,000 cubic yards of roadside tree debris, 4½ months after the major ice storm of Feb. 12-13. The cleanup cost was approximately \$23 million, according to VDOT. The trees that once blocked roads between Mecklenburg and New Kent were ultimately ground into wood chips, then used either for landfill cover or in wood processing facilities. (Richmond Times)



Tropical Storm Ida

The only tropical storm that threatened us was Ida but Ida mainly hit SW Virginia. Two weak tornadoes were reported in the Blacksburg area and Radford area and flooding in the southern counties of SW Virginia with 3 to 5 inches of rain. Springfield Park had only 0.19 inches of rain and a maximum wind of 20 mph on August 30th, 2021.

2021 Little Snow

Springfield Park had its largest snow of 4.2 inches on January 31, 2021 and Feb. was the snowiest month with 6.9 inches with 3.9 inches of snow occurring on the 11th and 12th of February. No other month had a measurable amount of snow.

Thunderstorms

Only two thunderstorms were rated as a 4 and the strongest of these two was on August 11, 2021 and rated a 4 because of its long period (2hrs. & 5 minutes) of lightning.

Thunder was heard on 33 days in 2021 at Springfield Park. The average is 35 days per year. August had 11 thunder days which was the greatest for one month in 2021 with only 1 rated 4 and none were rated 5 for 2021. Most were weak as 21 of the 33 were rated as category one the weakest. Cat. 1 may have had only one thunder heard.

21 (Cat. 1) 8 (Cat. 2) 2 (Cat. 3) 2 (Cat. 4) 0 (Cat. 5)

Temperature

YEAR- The mean temperature for 2021 at Springfield Park was 60.0 degrees which was near the average of 59.3 degrees. The warmest year at the Springfield Park station was 2012 with a mean average of 60.52 degrees. The Richmond International Airport had a mean of 60.4 degrees for 2021 which is near the average for the year of 59.0 degrees. Springfield Park had 57 days that the maximum temperature was 90 degrees or more and the average is 47.2 days, only 2010 and 2019 had more. Springfield Park had 60 night-time minimums which stayed 70 degrees or above; the average is 50.2 days. The maximum temperature at Springfield Park had 2 days with less than or equal to 32 degrees for the high temperature. Springfield Park had 87 days when the minimum temperature was less than or equal to 32 degrees; the average is 78.5 days. The lowest minimum temperature of 2021 was 14.9 degrees on January 30th. The warmest minimum temperature for the year was 75.9 degrees on July 13th.

SEASONS-

Spring was dry with only 9.98 inches of precipitation and the 4th driest on record and 5th coolest on record with a temp. departure of -0.3degrees.

Summer was the 5th wettest on record with 16.51 inches and the 5th hottest on record with a temp. departure of 0.7 degrees.

Autumn was the 3rd driest on record with 7.56 inches and 8th warmest on record with a temp. departure of 0.6 degrees. October was the warmest on record.

Winter of 2020-2021 was the 3rd wettest on record with 14.46 inches precip. and the 5th coolest on record with a temperature departure of 0.7 degrees.

MONTH--**Positive departures- Warm Months**

Dec had the greatest positive departure from normal **+6.1 degrees F.**

Oct had the 2nd greatest positive departure of **+4.5 degrees F.**

Mar had the 3rd greatest positive departure of **+2.7 degrees F.**

Aug had the 4th greatest positive departure of **+2.1 degrees F.**

Jan had the 5th greatest positive departure of **+0.9 degrees F.**

Jun had the 6th greatest positive departure of **+0.3 degrees F.**

Negative departures- Cold Months

Feb had the greatest negative departure from normal **-3.7degrees F.**

May had the 2nd greatest negative departure of **-3.3 degrees F.**

Nov had the 3rd greatest negative departure of **-2.5 degrees F.**

Apr had the 4th greatest negative departure of **-0.5 degrees F.**

Jul had the 5th greatest negative departure of **-0.2degrees F.**

Monthly Record Temperatures- (13 Years of Records)**Maximum temperature Average--**

Oct. set a new **high** record of 75.6 degrees F.

Minimum Temperature Average –

Oct. set a new **high** record of 54.8 degrees F.

May set a new **low** record of 51.8 degrees

Mean Temperature Average –

Oct. set a new **high** record of 65.2 degrees F.- The previous record was 63.5 degrees set in 2017.

Record high Max and low Min. Temperatures

May. had a new record **high max.** 95.5 on the 26th; previous record was 94.2 set in 2019.

April had a new record **low min.** 24.8 on the 3rd; previous record was 25.2 set in 2016.

Oct. had a new record **high min.** 40.2 on the 19th; previous record was 38.0 set in 2020.

DAY-

The hottest temperature of 2021 at Springfield Park was 96.3 degrees that occurred June 30th and July 1st. The average highest annual maximum temperature for this station is 99.4 degrees. The lowest minimum temperature for 2021 at Springfield Park was 14.9 degrees recorded on January 30, 2021. The hottest day was July 30th with a daily mean of 85.9 degrees and the coldest day of the year occurred on January 30th with the daily mean temperature of 27.4 degrees.

RANGE-

The **greatest** temperature range for the year at Springfield Park was 40.6 degrees, that occurred on March 10th with a high of 77.3 degrees & a low of 36.7 degrees. The **smallest** temperature range for the year at Springfield Park was 2.2 degrees, which occurred on Feb. 12, 2021 with a high temperature of 30.7 degrees and a low temperature of 28.5 degrees F. The **maximum monthly range** was 62.7 degrees for March 2021. Spring had the highest average temperature range of 25.7 degrees and the winter 2020-21 had the lowest temperature range of 18.7 degrees. May had the highest average range of 26.7 degrees and Feb. had the lowest average range of only 15.9 degrees

PRECIPITATION**YEAR-**

The total number of days this year with measurable precipitation at Springfield Park was 119 days and the average is 128.1 days. Springfield Park's total precipitation was 43.95 inches. 13-year average annual precipitation for Springfield Park is 48.89 inches or a negative departure of -4.94 inches. The total precipitation for 2021 at the Airport was 47.25 inches. The average annual precipitation for Richmond is 45.50 inches or a positive departure of 1.75 inches.

Season-

The Spring season was the 4th driest on record with 9.98 inches; the average is 11.90 inches
The Summer season was the 5th wettest on record with 16.51 inches; the ave. is 14.92 inches.
The Autumn season was the 3rd driest on record with 7.56 inches; the average is 12.07 inches.
The Winter season of 2020-21 was the 3rd wettest on record with 14.46 inches; the ave. is 10.13 inches.

MONTH-**Max. Precipitation Days**

Feb. had 17 days with measurable precipitation, the most of any of the months of 2021.
 Aug. with 14 days with measurable precipitation was the 2nd most of any of the months of 2021.
 Mar. & Apr. with 11 days with measurable precip. tied for 3rd most of any of the months of 2021.
 There were 119 days with a measurable precipitation amount.
 There were 79 days with a daily precipitation amounts greater than or equal to 0.10 inches.
 There were 13 days with daily precipitation amounts greater than or equal to 1.00 inch.
 There was 1 day with more than 2.00 inches; the record was 5 days in 2018.

2021 set no new precipitation records for the month.

CALENDAR-

The most precipitation recorded in a calendar day in 2021 was 2.43 inches on Aug. 7, 2021 and is the 3rd greatest in the month of August; the record was 3.75 inches in Aug. 2011. The record for all months is 5.09 inches which was on record for May 2018.

24-HOUR PERIOD-

The maximum precipitation in a 24-hour period for 2021 was also 2.43 inches on August 7th however the August record for Springfield Park is 3.83 inches that occurred 2011. The 24-hour period record for Springfield Park for all the months is 6.10 inches in 2018 on May 17th and 18th.

HOUR-

The greatest one-hour rainfall intensity during 2021 was 1.18 inches on August 7th; the Aug. record was 2.49 inches in 2018. The 2.66 inches in July 2020 for a one-hour is now the record for all of the months. The second greatest one-hour rainfall intensity was on June 2, 2018 with 2.63 inches.

Five-Minutes-

The greatest five-minute rain in 2021 was 0.29 inches on May 4th; the May record was 0.39 inches in 2014. Jun., Aug., and Sep had a 3-way tie for second place for the greatest five-minute rain in 2021 of 0.28 inches. The 5-minute record for Springfield Park is 0.67 inches set on August 10, 2013.

DROUGHT-

The longest dry period of 2021 without measurable rain was 15 days from May 11th to May 25th. There was no precip. for 10 days from May 12th to May 23rd. November 27th to December 9th was a 13-day period with only a trace of precip. November 27 to Dec 7th was a 11-day period with no precip. Jan 4th to Jan 14th was an 11-day period with no measurable precip. but the lack of precip. wasn't felt outside of the growing season with low temps. There was also a 13-day period with no measurable precip. from Mar. 2nd to Mar. 14th.

WIND**YEAR-**

The highest wind gust for the year was only 35 mph from the south that occurred on March 28, 2021 at 1308 hours ahead of a thunderstorm. The total wind run for the year was 23,338 miles. This was the 4th highest on record and the average is 22,610 miles.

MONTH-

The windiest month in 2021 was March with a wind run of 2,650.7 miles. Aug. was the month with the least wind of 1426.1 miles.

DAY-

The windiest day for 2021 was on March 19th with a wind run of 186.6 miles. December had the 2nd highest of 172.0 miles. The record wind run for Springfield Park during a calendar day was 284.1 miles set during Hurricane Irene on August 27, 2011. March had the highest average maximum wind gust of 19.3 mph.

SNOW**YEAR-**

The 2021 Springfield Park total snowfall was 11.5 inches and the total for the winter (**2020- 2021**) was 11.7 inches with 0.2 inches occurring in December 2020. During 2021 the Springfield Park station had 7 measurable snowfalls. The largest snowfall to occur in one calendar day at the Springfield Park Station was 4.2 inches on January 31, 2021. The maximum snow on the ground at sunset during 2021 was 3.1 inches on February 12, 2021.

MONTH-

The greatest monthly snowfall total for Springfield Park in 2021 was 6.9 inches in the month of February that occurred on 5 days.

STORM-

The most snow to fall in any one storm was 4.2 inches that occurred on January 31st. The greatest snow in a calendar day in 2021 was also 4.2 inches during the same snow.

BAROMETRIC PRESSURE**YEAR-**

The highest barometric pressure recorded for the year was 30.65 inches of mercury on February 21, 2021. The lowest barometric pressure for the year was 29.42 inches of mercury which was recorded on October 29, 2021.

MONTH-

March had the highest monthly mean barometric pressure of any month in 2021 which was 30.17. April had the lowest monthly mean barometer reading of any month at 29.96 inches.

RELATIVE HUMIDITY**YEAR-**

The highest average relative humidity was recorded in October with a monthly average relative humidity of 79.3%. March had the lowest average relative with an average monthly humidity of 63.4%. The lowest daily relative humidity for the year was 15% recorded on March 10, 2021. The average for 2021 was 71.6 %. The annual average is 70.2 % giving a departure of 1.4 %. The record high average was 75.5% in 2018.

SKY COVER

The cloudiness average value is based on (0 as clear), (1 as partly cloudy), and (2 as cloudy).

MONTH-

In 2021 the average sky cover was 1.03 units. February with 1.41 units was the cloudiest month of 2021. November was the clearest month with 0.77 units and September was the second clearest month with 0.78 units. The cloudiest season was the winter of 2020-2021 with 1.16 units and the average is 1.10 units. Fall was the clearest 0.94 with a normal of 1.01 units. Summer was 1.03 with a normal of 1.04. The spring season was 0.96 with the normal of 1.14.

Annual Records

2021 was the 5th driest year on record at Springfield Park with a total of **43.95** inches, a **-4.94**-inch departure based on the 13-year average of 48.89 inches.

Springfield Park's 2021 annual temperature average was **60.0** degrees F which was a **+0.5** degrees F departure from the 13-year average and the 7th warmest year since 2009.

In 2021 Springfield Park had the 5th least snowfall on record with **11.5** inches. The 13--year average is 14.7 inches or a departure of **-3.2** inches. The largest yearly total was 36.7 inches in 2010.

Springfield Park in 2021 had a wind run of **23,338.3** miles, the 4th windiest year. The average annual wind run at Springfield Park is **22,610.0** miles.

During the Year 2021 at Springfield Park there was a total of:

4 Days with Glaze

0 Days with Hail

10 Days with Sleet

7 Days with Measurable Snow

12 Days with Trace or more of frozen precip.

18 Days with Fog

33 Days with Thunder

53 Days with Frost

175 Days with Dew

119 Days with Measurable Precip.