

Looking Back Before We Spring Forward

Weather/Climate Analysis: January 2021 Report

Roy Wysnewski

Rainfall & Temperature Data:

Meadows

Rainfall – 0.86 inches (YTD: 67.85 in.)
22 yr. rainfall avg. – 1.64 in.

Average high-temp. 73.1 F
Above normal high-temp. Days: 17
Record high-temp. Days: -7

Airport

Rainfall – 0.70 inches (YTD: 58.12- in.)
Historical rainfall avg. – 2.49 in.

Average high-temp. 71.1 F
Above normal high-temp. Days: 15
Record high-temp. Days: 0

Analysis: January 2021 marks the first anniversary of this expanded weather/climate column. Therefore, it might prove interesting to recap a record-setting 2020 before **springing forward** into the new year.

From temperature and rainfall data accurately measured in the Meadows, the following conclusions can be made about 2020:

- It was the warmest year in the past six-years – in the period of time that temperature has been measured [using National Weather Service (NWS) approved equipment] in the Meadows -- see graph no. 1. This conclusion is in line with recent scientific reports indicating that nationally and worldwide, 2020 was either the warmest ever or perhaps equal to, or slightly less than 2016 (the previous record year).

Every month except December was above average – see graph number 2. Even though December's average high-temperature registered near the six-year normal, there were 18 days above-average!

- It was a very wet year with six months running above average – see Graph number 3, where the light blue bars represent a 22-year average for Sarasota County, and the dark blue bars represent 2020 Meadow's data. [Although rainfall has been accurately measured in the Meadows for a number of years, it wasn't recorded until 2020]. Four rainfall records were established: April's total of 7.6 inches (290% above average) was an all-time monthly record; November's total of 8.6 inches (340% above average)

also was an all-time monthly record; November 11th with a total of 7 inches, was an all-time daily record; and 2020 was the fourth wettest year in the past three decades (66 in. – 30% above average).

January 2021 emulated January 2020 in both temperature and rainfall: Temperature averaged above normal with seven record high-temperature days, and it was dryer than normal with a 48% rainfall deficit.

Climate Analysis: As stated last month, the year-long 2020 tracking climate change ‘puzzle’ (366 data pieces) has been assembled, thus providing a complete ‘picture’ of climate change covering the past 120 years in the greater Sarasota area. That climate change picture was based on NWS data recorded at the Sarasota-Bradenton International Airport.

Unfortunately, because of the Airport’s proximity to the Gulf of Mexico and the fact that gulf water temperatures are characteristically lower than that of the atmosphere, the NWS data (high-temperature records) have been ‘tempered’ for more than a century. Simultaneously, there is a consensus that atmospheric temperatures measured in our community, located about 5 miles inland from the gulf, are more comparable to measurements representing the Sarasota-Bradenton area in general. [Upon request, there is available a beautiful graph showing this comparison].

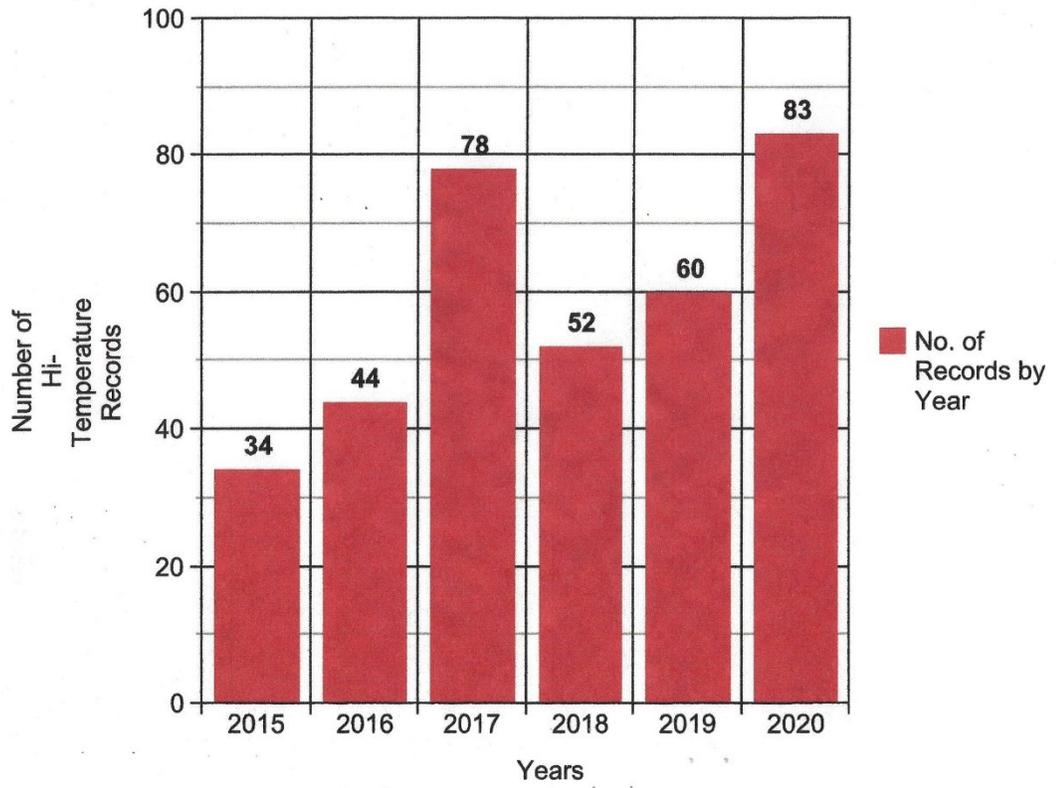
Having accurately measured and recorded daily Meadow’s temperatures throughout 2020, and now having access to accurate daily temperature data measured in the Meadows over the past six years (2015-2020), a ‘Tracking Climate Change in The Meadows’ program can **spring forward** beginning this month. By comparison to the 120-year NWS program just completed, this new program will provide a more realistic assessment of climate change for the Meadows.

The bar graph (picture) that visualizes climate change tracking this year is the completed 2020 graph (graph number 1) plus a 2021 bar – see graph number 4. With each month going forward, new high-temperature records will be added to the 2021 bar. Thus, at the end of this year, there will be a complete climate change picture for 2015-2021.

Send comments and questions about this month’s column to roywys8@msn.com.

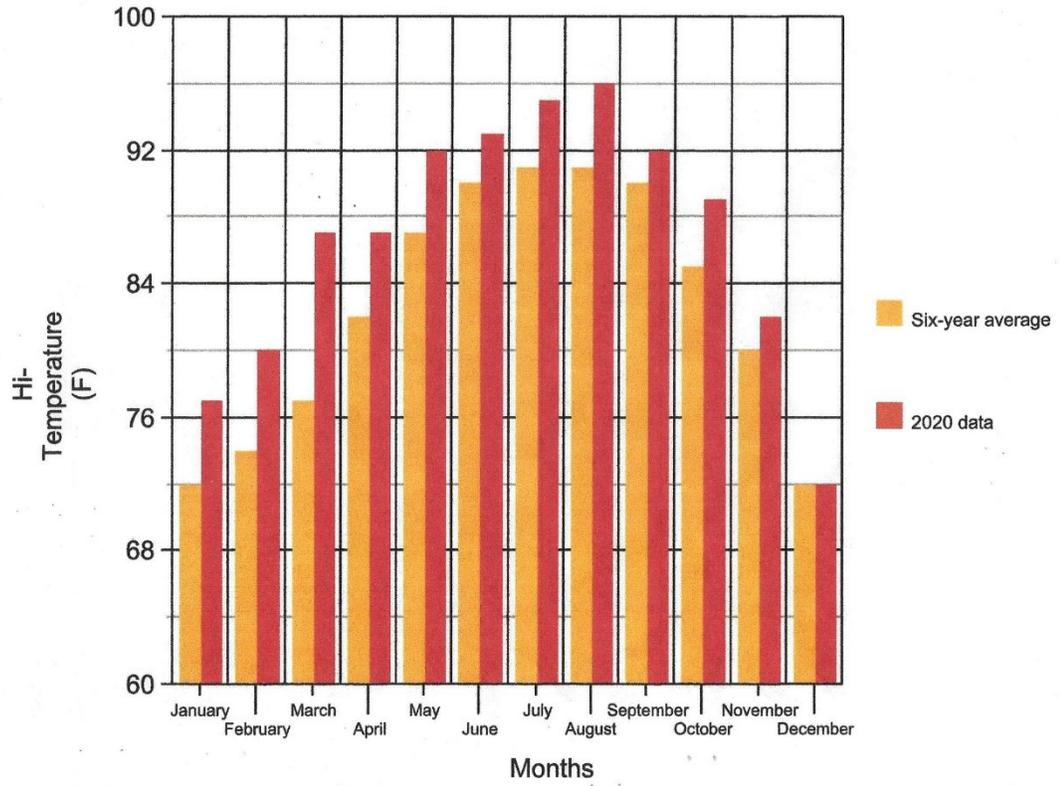
Graph Number 1

Tracking The Meadow's Hi-Temperature Data



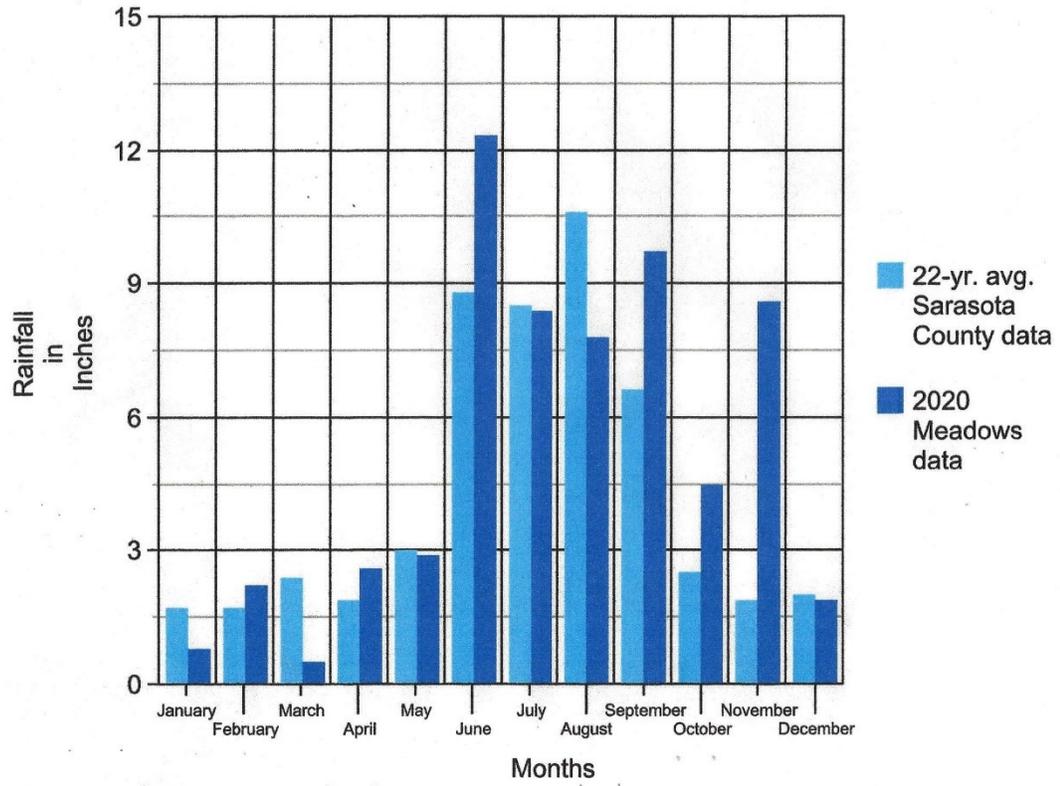
Graph Number 2

Meadows 2020 High-Temperature



Graph Number 3

Meadow's 2020 Rainfall



Graph Number 4

Tracking Climate Change in The Meadows
January 2021

