

## “Have A Heart” -- Meadows Residents Long for a More Comfortable 2021!

Weather/Climate Analysis: December 2020 Report

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### Rainfall & Temperature Data:

Meadows	Airport
Rainfall –1.88 inches (YTD: 66.99 in.) 22 yr. rainfall avg. – 2.03in.	Rainfall – 1.93 inches (YTD: 57.42 in.) Historical rainfall avg. – 2.53 in.
Average high-temp. 72.8 F Above normal high-temp. Days: 18 Record high-temp. Days: 0	Average high-temp. 72.6 F Above normal high-temp. Days: 17 Record high-temp. Days: 0

**Analysis:** In contrast to a year in which the Meadows rainfall averaged well above normal (30% --third largest yearly total in the past 22 years), December finished slightly below expectations (7%). Several daily rainfall records were set in 2020: April – 7.6 inches (290% above average); and November – 8.6 inches (340% above average). The Airport recorded an even more significant deficit in December (24%). The Airport was above average (8%) for the year yet fell nearly 10 inches short of the Meadows total.

This year ends as it began – with a string of above average temperature-days. Final results aren’t in yet, but it appears that 2020 may tie 2016 as the warmest year on record! This isn’t surprising because temperatures averaged above normal in the Meadows for the last 12 months. In fact, there were 18 days above normal in December -- albeit not excessively above normal as in previous months -- bringing the yearly total to 290, 79% above average.

“Have a Heart” Mother Nature! Meadows residents long for a more comfortable year in 2021. At the very least, it would give our overworked A/C systems a break. The good news is if the long-range weather forecast holds that a weaker than usual La Nina weather pattern is expected to last until May. Hopefully, this translates to more normal day-time temperatures during first quarter 2021.

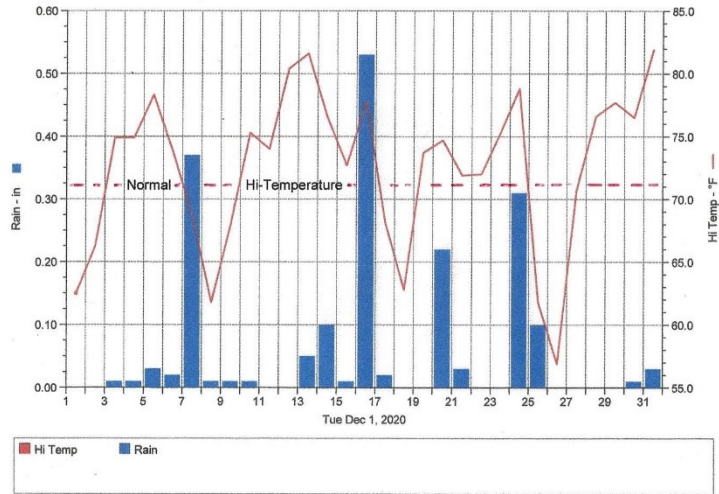
Monthly rainfall and high-temperature data are presented in the graph below.

**Climate Analysis:** The twelve-month 2020 tracking climate change ‘puzzle’ (366 data pieces) is finished. We now have a complete ‘picture’ of climate change covering the past 120 years in the greater Sarasota area. The final graph illustrating how our climate has changed since 1901 is presented below.

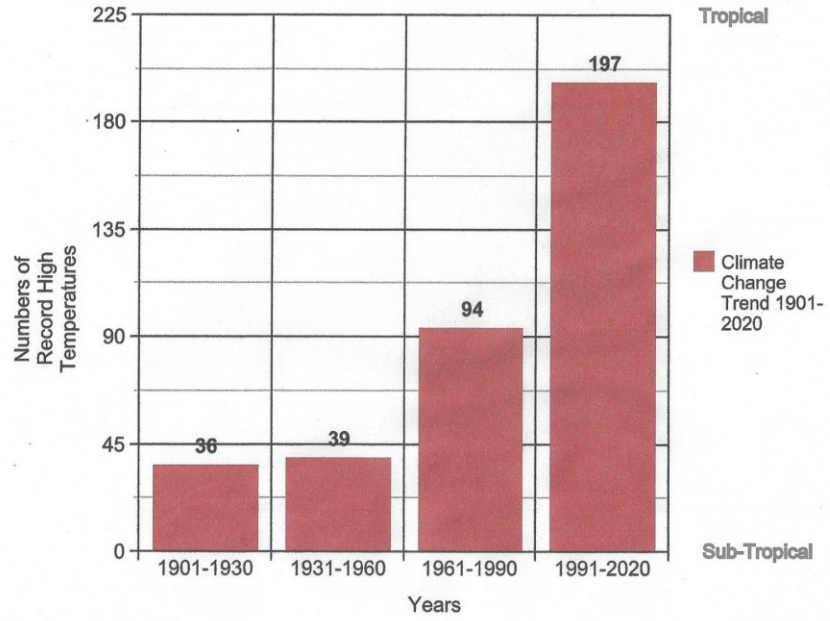
Two basic conclusions are 1. Record-high temperatures were first recorded in Sarasota at the beginning of the twentieth century – a number of records were relatively low (36 records over 30-yrs) and 2. The trend was mostly flat for the first 60 years, then the climate transition from sub-tropical to tropical started increasing exponentially during the 30-year 1961-1990 period. Scientists suggest that at this rate, and within 30 years, Sarasota will have the same summertime average temperature and annual rainfall as ‘tropical’ Miami, Florida does today!

More detailed conclusions can be made by increasing the graph’s yearly intervals (X axis) from 4 30-year periods to 12 decades – see second graph below. In this graph, the orange bars show climate change increasing uniformly from 0 records in 1901 to perhaps 60 records in 2020. Interestingly, the four red bars, called temperature ‘spikes’, represent hot decades. Researching these four decades discloses that the ‘spikes’ are associated historically with many extreme weather events nationally, in Florida, and here in Sarasota. If you are interested in learning more about this graph and its revelations, contact me at [roywys8@msn.com](mailto:roywys8@msn.com).

Meadows Rainfall and High - Temperatures  
December 2020



Tracking Climate Change in Sarasota, Florida



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