

This Summer's HEALTH Challenge: The Heat

Meadow's Weather/Hurricane Analysis: June & July 2022 Report
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Rainfall & Temperature Data:

	June	July
Rainfall for month:	9.0 inches	10.5 inches
Rainfall year-to-date:	19.8 in.	30.3 in.
23 yr. monthly rainfall average:	8.8 in.	8.2 in.
Average high temperature:	93.4 F (normal: 91.0 F)	94.7 (normal: 92.0 F)
Above normal temperature days:	24	28
Record high temperature days:	7	9

Weather Summary: Maintaining our good HEALTH during this summer's record heat has been challenging, to say the least! While we avoided the 100 F + temperatures that many in the nation faced, the high moisture content in the atmosphere made our mid to high nineties feel like 110 F+ -- dangerous heat indices! Florida now has a yearly average of twenty-five life-threatening 'heat days' with a heat index of 105 degrees. *Scientists at Climate Central project that there will be 130 such days each year by 2050!*

The record high daytime temperatures in June and July were accompanied by above normal rainfall, assuring a good start to the five-month 2022 'rainy season'. *The explanation for this is that for each degree (F) rise in temperature, there is a corresponding 7% increase in atmospheric water vapor.* Also, on a positive note, year-to-date rainfall totals exceed expectations.

Rainfall Analysis: As reported in the June Meadoword column, the rainy season began early this year when rainfall was above normal in both April and May. Once the official season began on June 1st, the April-May pattern persisted resulting in four consecutive months (April-July) of above normal rainfall. This continues to be good news for our lawns and lakes.

Although no rainfall records were broken during June and July, several abnormalities were observed. The first had to do with a general sense that it

rained every day in July. That certainly is understandable because there were nineteen days when rainfall was recorded – that is abnormal -- fifteen days is normal. The second abnormality relates to July's rainfall distribution across Sarasota County in which it varied significantly between the Meadows (10.5 inches) and the Sarasota-Bradenton International Airport (5.8 inches). During the rainy season, the Meadow's rainfall typically exceeds that at the airport – but rarely to this extent.

Temperature Analysis: Just how many daytime temperature records were broken in June and July? Sixteen! Records started falling in mid-June when they fell for six consecutive days. Then, beginning on July 18th, they fell for seven consecutive days. *That is unprecedented! When all the monthly data is in, July 2022 will likely be the warmest on record.*

Other temperature statistics included: 1) Monthly daytime temperatures averaged 4 degrees above normal in both June and July; and 2) There were fifty-two above normal temperature-days.

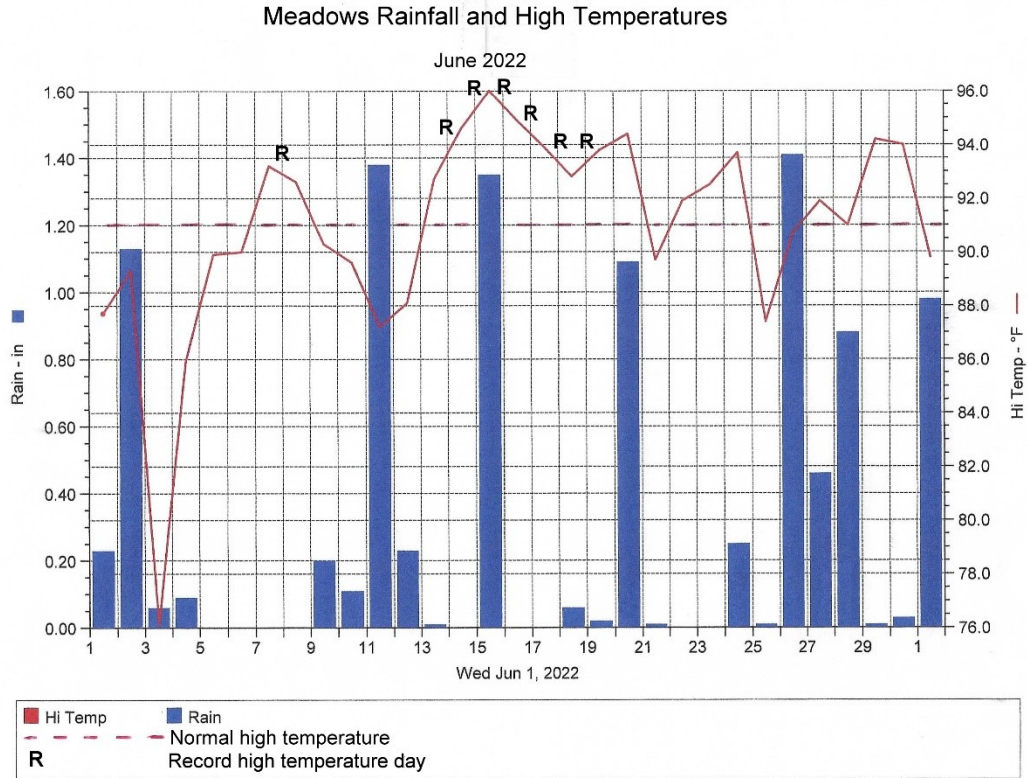
Monthly rainfall and temperature data are presented in the two graphs.

Hurricane Season Analysis: The 2022 hurricane season is off to a slow start. Based on historical records, a few Atlantic Ocean hurricanes begin forming in June and July, then formation gets into high gear by mid-August. And it is not until September and October that Southwest Florida gets in the act. The slow start this year is attributed primarily to a persistent stream of high-level Saharan dust that inhibits tropical storm development. The dust which exits Africa's west coast and extends westward to the Gulf of Mexico has been in play throughout June and July.

To date, tropical activity has been limited to three short-lived tropical storms, none of which had any impact on Florida: Alex (early June) and Bonnie & Colin (early July).

Historically, the Gulf of Mexico has been the 'incubator' for numerous late summer-early fall tropical storms and hurricanes. Based on National Weather Service records, near-surface Gulf water temperatures at Sarasota were above normal most days in both June and July. The differences were as much as 4 to 6 degrees F on many days in July! *Acknowledging these alarming statistics, residents should remain extra vigilant for the next three months.*

Send comments and questions about this month's report to:
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Meadows Rainfall and High Temperatures

July 2022

