

# Getting Started on Mosquito Research



## Today's Mosquito Data Page Header

- Enter “**Mosquito Data Page Header**” in your **Table of Contents** to easily find these instructions again.
- Begin each new entry in your notebook with “Today's Mosquito Data.”
- Include the **date, temperature, rainfall, and mosquito observations**. The **date is important** because mosquitoes appear during certain times of the year in some places, while in others they are present year round. **Temperature is important** because most mosquito species are active between 50°F (10°C ) and 100°F (38°C). **Rainfall is important** because it provides water in which female mosquitoes lay their eggs.

<p><b>Today's mosquito data:</b></p> <p>Date: <u>July 17, 2020</u></p> <p>Temperature: High: <u>95 F</u> Low: <u>77 F</u></p> <p>Rain today? <u>Yes, it rained in the afternoon</u></p> <p>Any mosquitoes observed? <u>Yes, I heard and saw several adult mosquitoes. They were very active just before the sun set.</u></p>	<p><b>Tips on how to fill out your data</b></p> <p><b>Daily High and Low Temperature:</b> Wait until early evening or the next day to get this information. Include whether this is Fahrenheit or Celsius.</p> <p><b>Rain:</b> Note if there was rainfall in the area.</p> <p><b>Mosquitoes observed:</b> Did you see, hear, or feel any mosquitoes? You can also include any comments about your observations.</p>
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## Where can I find daily high and low temperatures?

The following are a few suggestions:

- Weather app on your phone
- Local evening news broadcast or local news website
- **Weather Underground website:** Go to the link below:  
<https://www.wunderground.com>  
and **(1)** enter your location in “Search Locations” and **(2)** select “Station History.”

## Why get high and low temperature late in the day or the next day?

Why should I wait to get the high and low temperatures later in the day or even the next day? You might expect the hottest time of the day to be when the sun is directly overhead (called solar noon). But as you start tracking the daily high temperatures, you'll notice there is a delay between when the sun is at its highest point in your sky (directly overhead) and when the air reaches its warmest temperature of the day. Why is that? As the sun continues to shine throughout the afternoon, there is more heat coming in to Earth than leaving Earth. Therefore, the high temperature may not occur until 3:00 or 4:00 pm.

This same science concept also applies to the day's low temperature. You might expect the lowest temperature to occur just after the sun drops below the western horizon. While it does begin to cool off at that time, cooling will continue all night long as the heat that accumulated during the daytime leaves the surface (more heat is leaving the surface than coming to the surface). Therefore, the coldest air temperature typically occurs right around sunrise in the morning. You may also notice there are times when it is hottest earlier in the day and coolest later in the day. Why do you think that might happen? What do you observe happening on those days?