

Kansas Mesonet

In Kansas, no part of the weather is ever predictable. It can snow in May and tornados can pop up in February. Our seasons seem to be mere suggestions for mother nature. For gardeners, this is a constant frustration.

So much of gardening depends on the environment. Air temperatures, soil temperatures, precipitation, and humidity can all impact how our plants grow. In extreme cases, these factors even determine *if* our plants will grow.

Whether you're waiting for warmer soil temperatures to put down a pre-emergent herbicide, planning out planting dates or looking for sunnier days to move your vegetable seedlings outside, the unpredictability of our weather can be frustrating.

Fortunately for Kansas gardeners, an often unknown resource can help to at least track these fluctuating factors. This resource goes by the odd name of the Kansas Mesonet. The Kansas Mesonet is an online database comprised of data from weather stations across the state. These K-State Research and Extension weather stations were first established in 1986 and many are co-located with National Weather Service Cooperative Observing Stations.

In Shawnee County, we have one station in Rossville and another in Silver Lake. These stations are constantly monitoring and tracking many factors including; soil temperature, precipitation, air temperature, humidity and wind speed. As the stations track this information they upload it to the website every five minutes.

These data points are visible in many ways, but I prefer to utilize the weekly summaries. These summaries give averages for the above mentioned categories (and others) and display the data in easy to read tables divided by station location.

To access this free resource, go online and visit the Kansas Mesonet website, <http://mesonet.k-state.edu/> or simply search for "Kansas Mesonet" and click on the first link. The landing page will show you a map of all the stations across the state. From here you may select at the top of the map either temperature, 24-hr precipitation or wind. The map will then reflect those values for each station.

For the weekly summaries, go up to the top left of the screen and select the menu. From this menu you'll click on 'Weather' and then 'Weekly Summary'. Under the same selection of 'Weather,' you may also select the 'Historical Data' option from the menu and select any range of days as long as those dates span less than one year's time. Using this table, I was able to quickly look up the precipitation in the year 2010 in Rossville—34.38 inches. Additional information available on the Mesonet includes fire conditions, soil moisture and degree days for agricultural crops.

Using this data, along with average dates, the gardener can more accurately hone their craft. The only thing that the Mesonet cannot do it tell us what to expect in the future. For that, we can only hope for enough rain and sunny days to keep our gardens healthy and happy!

Other information about the Kansas Mesonet along with more weather resources can be found at: <http://climate.k-state.edu/>