Bluestem Breezes Karaline Mayer December 14, 2015

## 2015 Summer Growing Season

K-State maintains data from the Kansas Mesonet stations. Basically, weather data is collected from around the state every day. It is all available to you at mesonet.ksu.edu.

This column is not intended to discuss the topic of climate change, but rather to provide a conversation on the atypical summer of 2015 we experienced. I encourage each of you to check out the Mesonet website for additional weather based information.

Chip Redmond and Mary Knapp, representing the KSU Weather Data Library, provided the following information on the 2015 summer growing season:

The summer growing season length for warm-season plants is defined as the number of days between the last spring freeze and the first fall freeze. For warm-season annual plants, planting should generally be delayed until after the final freeze of spring due to the risk of plant injury. The first freeze of fall typically kills summer annual plants and forces warm-season perennials to go dormant.

The summer growing season length varies greatly across Kansas due to a substantial climate gradient from northwest to southeast. The average summer growing season length for warm-season plants in Kansas is 176 days, as measured at our Kansas Mesonet stations. In 2015, the state average was 193 days, almost 20 days longer than typical.

Also, despite several late-May freezes, the average final spring reading of 32 degrees F or less was April 18th, a week later than the climatology average of April 11th. The 2015 fall freezes averaged two weeks later than the climatological average of October 28th.

Interestingly enough, with freeze date averages only suggesting a seven-day lengthening of the growing season, there was a wide range depending on location. This result likely stems from the fact that many of the early freeze locations had a very late fall freeze (mid-to-late November). For example, Cheyenne County had a summer growing season of 131 days (26 days less than the climatology average) with a last spring freeze in May and a first fall freeze in September. Meanwhile, Sedan in Chautauqua County had a summer growing season for of 231 days (28 days more than the climatology average), with a last spring freeze in April and the first fall freeze in November. That is a 100-day difference across Kansas!

Manhattan had a summer growing season of 213 days. The last spring freeze was March 31 and the first fall freeze was October 30, 35 days longer than average. In an average year, the last spring freeze is April 18 and the first fall freeze is October 13.

See all the data on our Kansas Mesonet webpage: www.mesonet.ksu.edu/downdraft/summary/2015/

For additional information, visit the Extension Office (215 Kansas, Courthouse, Alma; kamayer@ksu.edu; 765-3821). For Bluestem Breezes archives, check out wabaunsee.ksu.edu.