

2009

Weather and Growing Season Summary, 2008

Mark A. Licht

Iowa State University, lichtma@iastate.edu

Wayne B. Roush

Iowa State University, wroush@iastate.edu

Follow this and additional works at: http://lib.dr.iastate.edu/farms_reports



Part of the [Agricultural Science Commons](#), and the [Agriculture Commons](#)

Recommended Citation

Licht, Mark A. and Roush, Wayne B., "Weather and Growing Season Summary, 2008" (2009). *Iowa State Research Farm Progress Reports*. 635.

http://lib.dr.iastate.edu/farms_reports/635

This report is brought to you for free and open access by Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State Research Farm Progress Reports by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

Weather and Growing Season Summary, 2008

Abstract

Includes:

Weather Summary

Growing Season

Crop Yield and Quality

Disciplines

Agricultural Science | Agriculture

Weather and Growing Season Summary, 2008

Mark Licht, field agronomist
ISU Extension
Wayne Roush, farm superintendent

Weather Summary

The 2008 growing season resulted in mean monthly temperatures that varied from 0 to 7°F below the 30-year average (Table 1). This year there were two days above 90°F, down from 10 in 2007 and 25 in 2006. Overall, 2008 was a cooler year than has been experienced for the last several years. However, in western Iowa, this growing season will be remembered more for volatility in crop, livestock, and input prices than for weather due to the unexpected excellent grain yields in the area.

Precipitation was generally above the 30-year average in 2008. The month of May was the wettest month with more than 5 in. of rain, but October was the month with the greatest departure from normal at 4.22 in. total rainfall (Figure 1). Rains delayed both planting and harvesting in western Iowa but not to the extent in other parts of Iowa.

With temperatures below normal throughout the growing season, the growing degree days accumulation below the 5-year average for the entire season (Figure 2). Although growing degree days were negative for the growing

season, the departure remained steady for the months of July and August before further dropping in September.

Growing Season

The growing season started with timely spring field operations. May rains delayed planting progress and herbicide applications with wet and sometimes flooded conditions. Hay harvest was delayed and no fourth cutting was taken. Harvest conditions were challenging again in 2008 due to untimely rainfall starting in late-September through October. As a result, harvest was delayed and completion was pushed back to late November.

Crop Yield and Quality

Corn and soybean yields were much better than expected across the area considering the cooler than normal temperatures. Lodging started to occur in November but most was not severe. Fall field operations and nutrient applications were cut short with cold December temperatures and snow events, which will result in a larger workload for field operations in the spring.

Table 1. Monthly precipitation, average monthly temperature, and departure from normal for 2008.

	Precipitation		Temperature		Days 90°F or above
	Total	Departure*	Mean	Departure*	
January	0.50	- 0.14	18	- 4	
February	0.90	0.25	18	- 7	
March	0.90	- 1.16	34	- 4	
April	4.10	0.72	45	- 5	
May	5.10	0.84	58	- 3	
June	5.09	0.47	70	- 1	
July	3.20	- 0.68	74	- 1	1
August	2.50	- 1.04	71	- 1	1
September	3.25	0.20	63	- 1	
October	4.22	1.88	52	0	
November	2.30	0.79	36	- 1	
December	0.81	0.03	18	- 6	
Total	32.87	2.33	n/a	n/a	2

*Departure from 30-year average as recorded at the ISU Western Research Farm weather station. When inaccurate data was available from the ISU Western Research Farm weather station, data was retrieved from Iowa Department of Agriculture and Land Stewardship, Climatology Bureau, and National Agricultural Statistics Service, Crop, and Weather reports.

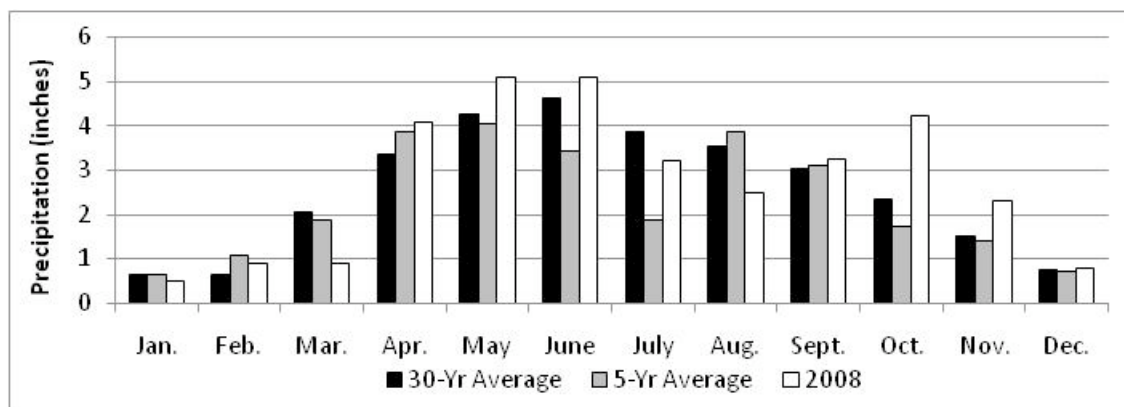


Figure 1. 2008 monthly average precipitation compared with 30-year and 5-year average precipitation recorded at the ISU Western Research Farm weather station.

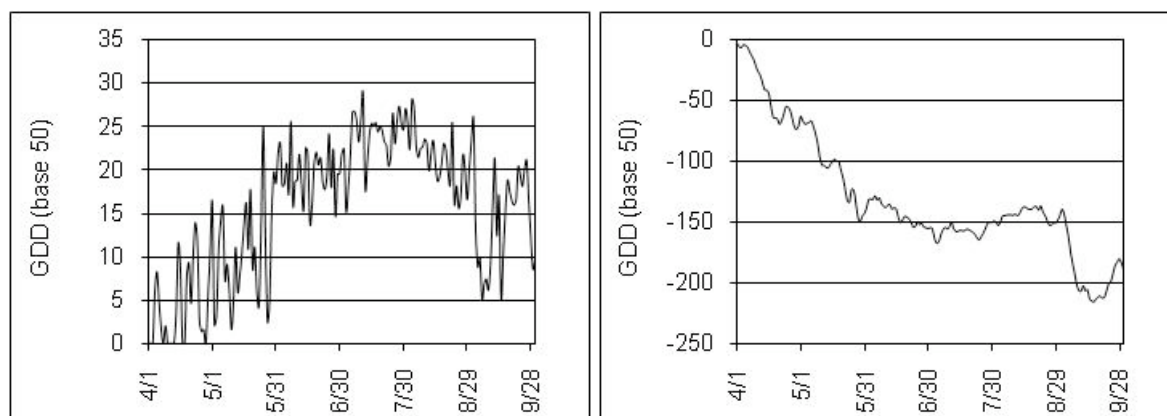


Figure 2. Daily growing degree day units (GDD base 50) for the 2008 growing season from April 1 to September 30 (left) and 2008 cumulative growing degree day (GDD base 50) deviation from the 5-year average (right) based on ISU Western Research Farm weather station high and low temperatures.