

## Weather Effects on Arizona Agriculture in 2004

With Arizona's diverse topography, the State's temperatures range from the wintertime cold in the higher mountain areas to the searing summertime heat of the desert areas. Arizona's wide spectrum of climate and terrain support a remarkable agricultural diversity. Virtually all crops in Arizona are irrigated, meaning yield variability is less influenced by rainfall here than in the rain-dependent agricultural states. Weather conditions are still important to crop farmers in making planting and harvesting decisions. The highest recorded temperature in 2004 was 115 degrees at Parker on August 9 and 10. Flagstaff recorded the lowest temperature of 4 degrees below zero on February 6.

January: Alfalfa condition was fair to excellent. Range and pasture conditions ranged from very poor to excellent and then began to deteriorate over the month. Livestock was in fair to good condition, stock water was adequate, soil moisture was short, and insect damage was none to light. Temperatures were below normal for the month ranging from a high of 82 degrees to a low of -3 degrees. Excluding the first week, there was slight rain throughout the month.

February: During the first week of February small grain (barley and durum wheat) planting was virtually complete. Emergence was completed by week two. Alfalfa, range and pasture remained the same as January. Temperatures continued to stay below normal with a high of 85 degrees and a low of -4 degrees. Much needed precipitation fell towards the end of the month.

March: The first week of March brought heavy rains. Temperatures also saw triple digits for the first time of the year. Temperatures ranged from a high of 102 degrees to a low of 8 degrees. Alfalfa, range and pasture continued the same as the previous months. Cotton planting began the last week of March.

April: Conditions for each crop continued to stay the same. Heavy rains fell the first week of April while the rest of the month saw traces of rain. Temperatures were above average ranging from a high of 106 degrees to a low of 0 degrees.

May: Alfalfa, range and pasture conditions remained the same as the previous month. Small grain (barley and durum wheat) harvest began the third week as virtually all acreage had headed. One quarter of the small grain harvest was done by the end of the month. Temperatures were above normal ranging from 105 to 25 degrees. No rain was reported for May.

June: Cotton planting was completed by week one while one third of the acreage had reached the squaring stage. Cotton bolls started to set the final week of June. Crop conditions remained the same as previous months. Temperatures were normal for the month with a high of 112 degrees and a low of 30 degrees. Week four of June brought a trace of rain, which was more than Arizona had seen in seven weeks.

July: The third week of July brought heavy rains. Small grain (barley and durum wheat) harvest was completed by week four. Temperatures were mostly below normal ranging from 114 to 33 degrees.

August: The first few weeks of August brought more rain to Arizona. Alfalfa condition remained in fair to excellent shape, and range and pasture conditions stayed in the mostly very poor to good range. Cotton bolls finished setting around the second week of August. Temperatures were above normal for the first couple weeks but below normal the last few weeks. Temperatures ranged from 115 to 40 degrees.

September: Slight rainfall continued throughout the month. Cotton condition was mostly fair to excellent. Yuma began harvesting around the third week. Cotton bolls were completely opened by the end of the month. Temperatures were above normal for the first few weeks but below normal the last two weeks. Temperatures ranged from 114 to 27 degrees.

October: October brought cooler temperatures with a high of 103 degrees during the first week and a low of 15 degrees. Heavy rains fell toward the end of the month contributing to temperatures falling into the eighties. Alfalfa and cotton conditions stayed relatively the same. Range and pasture conditions started to deteriorate. Cotton harvest was 50 percent complete by month's end.

November: Temperatures continued to get cooler with a high of 87 degrees and a low of 16 degrees. Scattered showers popped up throughout the month. Wet conditions slowed cotton harvest.

December: Traces of rain were seen through the month. Alfalfa, range and pasture conditions stayed nearly the same as they had throughout the year. By the end of the month, cotton harvest was virtually complete. Temperatures were normal for this time of year, with a high of 80 degrees to a low of 0 degrees.