

IOWA PRELIMINARY MONTHLY WEATHER SUMMARY- DECEMBER 2010

General Summary. December temperatures averaged 19.5° or 3.1° below normal while precipitation totaled 1.24 inches or 0.01 inch greater than normal. This ranks as the 29th coolest and 57th wettest December among 138 years of state records.

Temperatures. Cooler than usual weather prevailed throughout most of the early and mid portions of December with 16 of the first 19 days averaging on the cold side of normal. The season's first sub-zero readings were recorded in a few northeast Iowa locations on the 5th with most of the state falling below zero on the 13th and 14th. Elkader reported the lowest temperature of the month with a -22 degree reading on the 14th. Milder air prevailed late in the month with nine of the final 12 days of December averaging on the warm side of normal. Unseasonably warm and humid air on the 29th, 30th and 31st melted most of the snowcover across the southwestern two-thirds of Iowa. The mildest day by far came on the 30th when Shenandoah soared to 66 degrees. However, deep snow cover held high temperatures down to the upper 30's over northeastern areas. Monthly temperatures averaged 4 to 7 degrees below normal over northeast Iowa where deep snow prevailed for most of the month while the far southwest averaged within one degree of normal.

Heating Degree Day Totals. Home heating requirements, as estimated by heating degree day totals, averaged the same as last December and 7% more than normal. Degree day totals so far this heating season (since July 1) are running 5% less than last season and 6% less than normal.

Precipitation. A very persistent storm track brought a parade of storms to northeastern areas of Iowa while the south was unusually dry. A total of eight storms brought an inch or more of snow to the state and all but one were centered over the northeast. The largest storms brought snow totals of seven inches or more on the 3rd-4th, 11th-12th, 20th and 23rd-24th. Monthly snow totals varied from only 0.7 inches at Sidney up to 36.0 inches at Waukon. At Waukon this was the snowiest calendar month of record, slightly exceeding the previous record total of 35.5 inches set in December 2008. The statewide average snowfall was 13.1 inches or 5.8 inches greater than normal and ranks as the 11th highest December total among 124 years of records. Yet another storm event on the 10th-11th brought widespread rain to the state with greatest amounts again over the northeast. Cresco and Decorah both recorded their wettest December's ever. At Cresco a 3.60 inch amount was the highest December total among 105 years of record (old record 3.55 in 1982). At Decorah 3.29 inches of precipitation fell, surpassing the 3.12 inch total recorded set just last December among 124 years of record.

The most disruptive storm of the month was a blizzard on the 11th-12th when wind gusts of 50 to 60 mph over western Iowa coincided with moderate to heavy snowfall. Nearly all highways over the northwest one-third of the state were closed by drifts and very poor visibility. Audubon Airport reported the highest wind gust at 70 mph while Waukon had the most snow with 12 inches. Meanwhile wind chills dipped to -30 degrees at Estherville near day break on the 12th.

Harry J. Hillaker, State Climatologist
Iowa Dept. of Agriculture & Land Stewardship
Wallace State Office Bldg.
Des Moines, IA 50319
Telephone: (515) 281-8981
E-mail: Harry.Hillaker@IowaAgriculture.gov