

# Minnesota's Climate

THE COCORAHS 'STATE CLIMATES' SERIES

**Minnesota...You can expect just about any kind of weather nature has to offer except for hurricanes.**

By Peter Boulay, Minnesota Climatology Office

The mean annual precipitation is 34 inches in extreme southeast Minnesota, an amount that gradually decreases to 19 inches in the extreme northwest portion of the state. Although the total precipitation is important, its distribution during the growing season is even more significant. For the most part, native vegetation grows for seven months (April to October) and row crops grow for five months (May through September). During the latter five-month period, approximately two-thirds of the annual precipitation occurs. Statewide, two of the driest years were 1910 and 1976, while two of the wettest were 1965 and 1977. The 24-hour rainfall record is 15.10 inches near Hokah in Houston County on August 19, 2007. The annual maximum precipitation record is 53.52 inches in 1991 at St. Francis in Anoka County.

Seasonal snowfall averages near 80 inches in the highlands along the north shore of Lake Superior in northeast Minnesota, gradually decreases to 40 inches along the Iowa border in the south, and is around 40 inches along the North Dakota and South Dakota borders in the west. Snow cover of one inch or more over the state occurs on an average of about 110 days annually, ranging from 85 days in the south to 140 days in the north. The seasonal snowfall record for Minnesota is 170.5 inches at the old Pigeon River Bridge crossing in Cook County during the winter of 1949-1950.

Heavy snowfalls of greater than four inches are common any time from mid-November through mid-April. Heavy snowfalls with blizzard conditions affect the state on an average of about two times each winter. The most devastating blizzards were those of January 11-13, 1888, and of November 11-12, 1940, which resulted in the loss of many lives and a heavy toll of livestock. "Blizzard conditions" are when visibilities are reduced to less than one-quarter of a mile for several hours due to falling and/or blowing snow. The wind must be at least 35mph. Another memorable blizzard occurred on October 31, 1991 and is known as the Halloween Blizzard. The Twin Cities received 28.4 inches from this storm that lasted until November 3. The 24-hour snowfall record for Minnesota is 36 inches, reported near Finland on January 7, 1994.

For much more on Minnesota's climate please see the Minnesota Climatology Working Group web site at: <http://climate.umn.edu/>