

Top Weather Events of 2011 for Northeast and North Central Illinois and Northwest Indiana

by Jim Allsopp, Warning Coordination Meteorologist

February 1-2 Blizzard

Northeast Illinois and northwest Indiana were hit by one of the most powerful winter storms in history. There is no doubt that this event had more impact and notoriety than any other weather event in 2011. Although it ranks third in total snowfall for a Chicago winter storm (after the 1967 and 1999 storms), in terms of snow intensity, wind, and lightning production, this blizzard was second to none. Fourteen people died in the storm.

Light snow began late on January 31 as a weak impulse moved out ahead of the main storm system. This produced one to two inches of light snow over parts of northern Illinois. In the wake of this initial shot of snow, cold northeast winds developed producing some lake effect snow over parts of northern Illinois during the morning of February 1. As the main storm moved northeast out of the southern Plains, snow and wind intensified during the afternoon of February 1. Blizzard conditions, with winds of 30 to 50 mph, heavy snow and blowing snow, and visibilities reduced to a quarter mile or less, developed by the evening of February 1 and continued into the morning of February 2.

Hundreds of motorists were stranded on roadways. Parts of Interstates 39, 57, 80 and 290/Route 53 were closed. The National Guard was activated to assist stranded motorists. In Chicago, a bus got stuck on Lake Shore Drive blocking the northbound lanes. Heavy snow and 50 mph winds trapped 1000 vehicles in the traffic jam, and drivers had to be rescued. Some were trapped in their vehicles for up to 12 hours. More than 1300 flights were cancelled at O'Hare and Midway Airports, and Amtrak service out of Chicago was halted.

Storm total snowfall was 21.2 inches at O'Hare Airport, and 15.1 inches at Rockford Airport, making this the third largest snowstorm on record for both cities. Other snow totals included 17.1 inches at National Weather Service in Romeoville, 21.7 inches at Chicago Midway Airport, 24.2 inches at Beach Park, 23.7 inches at Elk Grove Village, 23.5 inches at Spring Grove and 23.1 inches at Inverness.

There was frequent lightning and thunder in Chicago and the southwest suburbs during the height of the storm on the evening of February 1, and small hail was reported in a thunderstorm at Midway Airport. Winds gusted as high as 61 mph at O'Hare and visibility was reduced to at least one quarter mile for eleven consecutive hours.

February 9-10 Bitter Cold

The coldest 48 hours of winter occurred in early February. On the 9th at Chicago the low was -2F and the high was 12F. On the 10th the low was -9F and the high 16F. At Rockford on the 9th the low was -7F and the high was 9F and on the 10th the low was -20F and the high was 17F. The -20F at Rockford set a record for the

date. Other low temperatures on the 10th included -20F at West Chicago, -21F at Aurora, Rochelle and Marengo.

May 22 and 25 Tornadoes

On May 22 a strong line of thunderstorms moved through north central Illinois producing damaging winds and several tornadoes. An EF1 tornado produced a 29 mile long path through Ogle and Winnebago Counties. The tornado started just east of Forreston. Two mobile homes were severely damaged in Ogle County. In Winnebago County several outbuildings were damaged or destroyed and the roof was damaged at Kennedy Middle School on the west side of Rockford. Many large trees and limbs were snapped by the tornado as well. At least four other small brief tornadoes were documented in Ogle and Winnebago Counties. In addition there was widespread tree damage from strong straight-line winds over Winnebago County. Another brief EF1 tornado occurred on the north side of Rensselaer in Jasper County, Indiana, damaging a Farm Bureau building and an Agricultural Extension office.

A series of small supercells developed in the morning of May 25 producing several tornadoes over east central Illinois and northwest Indiana. An EF1 tornado occurred northeast of Hopkins Park in Kankakee County. The tornado damaged a garage, a grain bin, and other outbuildings, poles and trees. Two tornadoes occurred in Newton County, one rated EF1 and the other EF2. The twisters mostly damaged outbuildings, grain bins, trees and poles. Two more tornadoes occurred in Jasper County, including one that hit the southeast side of Rensselaer – the second tornado in three days to hit the town. Storms also produced wind damage in Iroquois County and elsewhere in northwest Indiana.

June 4 Northwest Indiana Blowdown

Thunderstorms produced a swath of wind damage from St John and Crown Point in Lake County Indiana, southeastward into southwest Porter and northern Jasper Counties. Winds were estimated to 90 to 110 mph in some locations. Trees and signs were blown down and semis were overturned. A weigh station on I-65 was damaged. The most intense damage occurred near Route 2 between I-65 and Route 231 southwest of Hebron. Large groves of trees were flattened, garages, outbuildings and grain bins were destroyed and metal truss power line towers were collapsed.

June 21 Chicago area Wind and Tornadoes

A powerful line of thunderstorms moved southwest to northeast from LaSalle County to the Chicago metro area producing damaging winds and a couple of brief tornadoes. Widespread winds of 50 to 70 mph blew down hundreds of trees, tree limbs and power lines. There were scattered pockets of winds 70 to 90 mph with more extensive tree damage and some structural damage over the west and north suburbs of Chicago. The worst of the storms hit DuPage County, north and west Cook County and eastern Lake County. Some trees and limbs fell on homes and vehicles. Two people were injured when a tree crushed a car on the north side of Chicago. The roof of a building near Wrigley Field was damaged. Apartment roofs were damaged in Maine Township and Prospect Heights. A wind gust to 81 mph was measured at Palwaukee Airport, where hangars were damaged and two planes were flipped. Brief tornadoes occurred in Downers Grove and Mt. Prospect, where more extensive tree damage occurred.

June 30 Lakefront Supercell

A powerful supercell thunderstorm developed just off the Illinois lakefront. The storm spawned a waterspout over Lake Michigan. The rear flank of the storm produced winds to 80 mph along the shoreline of Lake County blowing down hundreds of trees. Later the storm produced hail up to the size of baseballs over the west side of Chicago. Hail caused \$2 million in damage to glass panels at the Garfield Park Conservatory. Also on the west side of Chicago, 130 police cars were damaged by large hail.

July 11 Derecho

A long lived, intense line of thunderstorms, known as a Derecho, swept across northern Illinois in the early morning hours of July 11. The winds flattened corn fields, blew down power lines and poles, and damaged thousands of trees. The worst damage occurred over the northern tier of Illinois counties from Winnebago and Ogle Counties eastward to the north suburbs of Chicago. The high winds and falling trees caused roof damage to buildings and homes. Falling trees and limbs also damaged vehicles. A few semis were overturned. A man was killed on the west side of Chicago when a tree fell on his car. As many as 850,000 customers lost power. ComEd deployed more resources to this storm than any event in its history. A total of 1100 crews from 14 states repaired or replaced 78 miles of wire, 600 poles and 1000 transformers.

July 17-21 Heat Wave

An intense heat wave gripped northern Illinois and northwest Indiana through mid and late July. Temperatures were in the 90s for 5 straight days, topping out at 99F on the 20th and 21st at Chicago's O'Hare Airport, while Rockford had highs of 100F on the 19th and 20th. These were the first 100F degree temperatures in Rockford since 1989. Sixteen people died from the heat in Cook County. Thunderstorms brought some relief on the 22nd and 23rd but very warm weather persisted through the end of the month. In Chicago, July ended up 5.7 degrees above normal, making it the third warmest July on record. At Rockford, July was 6.0 degrees above normal. It was the fifth warmest July on record.

July 22-23 Flood

Thunderstorms produced locally heavy rain and flooding in the north suburbs of Chicago on July 22. Additional thunderstorms later that night into the morning hours of July 23 produced torrential rain over parts of Cook and DuPage Counties. Rainfall rates of 2 to 4 inches per hour resulted in widespread flash flooding. Thousands of basements were flooded, some with as much as 8 to 10 feet of water and sewage. Many roads, viaducts and intersections were flooded and many cars were stranded in flood waters. Sections of Interstate 57, Interstate 94 and Lake Shore Drive were closed by flood waters.

The heaviest rain was over northern Cook County. Thunderstorms dumped 6.86 inches of rain at O'Hare International Airport on July 23, a new Chicago daily rainfall record. Total rainfall for the event was 8.20 inches. The total for the month of July was 11.15 inches, which was a record and 7.64 inches above normal. Other rainfall totals included 7.25 inches in Arlington Heights, 7.17 inches in Elk Grove Village, and 6.06 inches at Palwaukee Airport. Rainfall was 3 to 6 inches across parts of DuPage and central and southern Cook Counties.

September 24 Waterspouts

At least a half dozen waterspouts were observed and photographed over southern Lake Michigan from Zion to Chicago, with additional waterspouts off the Wisconsin lakefront. Most of the waterspouts occurred in the morning between 7:00 a.m. and 11:00 a.m. None of them made landfall or caused any damage.

Fall Lake Michigan Storms

Deep low pressure over the Great Lakes produced very strong winds and high waves over Lake Michigan on September 30. Peak wind gusts from Chicago to Michigan City were 50 to 60 mph. Waves were as high as 20 to 25 feet.

Another strong low pressure moved north from the Ohio Valley to the lower Great Lakes October 19 and 20. Once again very strong winds occurred over Lake Michigan and the Illinois and Indiana shores of the lake. Winds gusted to over 60 mph along the lakefront from Michigan City to Waukegan. Waves up to 20 feet high battered the lakefront. Twenty boats were damaged or destroyed when they broke free from their moorings in Monroe harbor.