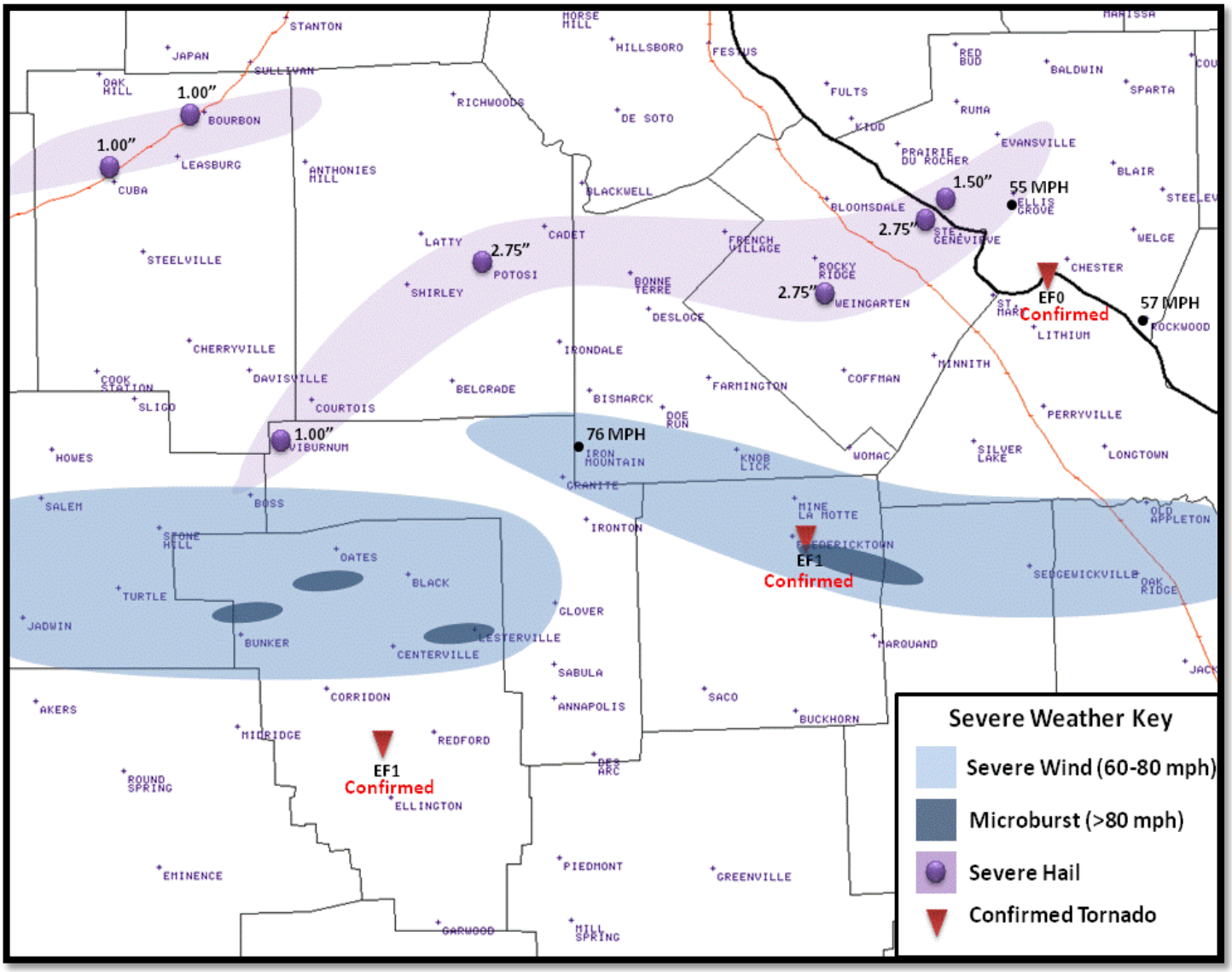
St. Louis

# Derecho

## May 8th, 2009

## Overview

A fast moving complex of severe thunderstorms brought damaging winds, large hail and tornadoes to southern Missouri and Illinois. Thousands of trees were uprooted, numerous buildings and homes sustained damage from wind and hail. In addition, 3 to locally 5 inches of rainfall caused extensive flash flooding from Crawford County, Missouri to Randolph County, Illinois.




**Preliminary Damage Map**

## Damage Surveys

**Madison County, Missouri**

A swath of straight line winds, commonly known as downbursts, with estimated winds of 60 to 75 mph extended from the northwest corner of Madison County Missouri through Fredericktown along Highway 72 to the Bollinger County line. Much of the damage that occurred was due to fallen trees, that were either uprooted or snapped at the base of the trunk. Structural damage was observed in the town of Fredericktown where roofs and windows were damaged, and a few trees fell into houses. Eye witnesses reported that the severe wind gusts lasted up to 45 minutes in duration.

Within the larger swath of severe winds were pockets of more intense damage caused by microbursts with wind gusts greater than 80 mph. Microbursts are small but very strong winds caused by downdrafts of individual thunderstorms. The most intense wind damage occurred in the area from 3 miles north of the intersection of Highways F and V. Many large trees were blown down in this area which were caused by estimated gusts as high as 90 mph.
A small tornado track was found southeast of Fredericktown near the intersection of county roads 229 and 234. The tornado then moved along County Road 234 for one half mile. Damage was determined to be low end EF-1 intensity with winds estimated to be as high as 90 mph.

**St. Francois County, Missouri**

Isolated to scattered areas of tree damage were confined across the southern third of St. Francois County. One microburst hit Iron Mountain where two large trees smashed through two homes.

**Reynolds and Iron Counties, Missouri**

Most of the damage was caused by straight line winds with one small tornado track. The survey of damage indicated a large swath of straight line winds with estimated speeds of 60 to 70 mph over the northern third of Reynolds county and parts of northwestern Iron county. Much of the damage was due to fallen trees. While trees were down over most of Reynolds and Iron counties, the tree damage was most concentrated in an area between Bixby and Reynolds, eastward to an area between Ironton and Glover. Within that area, microbursts occurred, with estimated wind speeds up to 100 mph. Three particularly intense microbursts were surveyed along Highway KK just south of Highway J, along Highway UU north of Bunker, and along Highway 49/72 near Lesterville. In these areas, it was noted that up to 80 percent of the forest had been felled. Scattered structural damage, mostly to roofs and outbuildings, was also noted. It was determined that an EF1 tornado occurred 6.5 miles north of Ellington in Reynolds county. Significant roof damage to 2 homes was noted, as well as a chaotic damage pattern in the hundreds of downed trees. Debris was scattered for approximately one quarter of a mile. The tornado damage path was estimated to be approximately 2 miles long and one quarter mile wide.

## Hail Pictures


**Baseball-sized hail From Potosi, Missouri**


**Cuba, Missouri Severe Hail**

Please note that while the severe weather data presented in this event synopsis has been quality controlled, it is still considered unofficial. Official reports & statistics for severe weather events can be found in the ***Storm Data*** publication (http://www.ncdc.noaa.gov/IPS/sd/sd.html) or ***Storm Events Database*** http://www.ncdc.noaa.gov/stormevents/), available from the National Centers for Environmental Information (NCEI) web page [formerly the National Climate Data Center (NCDC)].

More detailed tornado track information can be accessed using the National Weather Service Damage Assessment Toolkit for all tornadoes beginning in 2012. https://apps.dat.noaa.gov/StormDamage/DamageViewer/

***Any questions regarding this event review should be address to w-lsx.webmaster@noaa.gov***