# The Weather of 2008

# Contents

General Weather Summaries	2
Significant Weather Events	5
The Year in Pictures	18

#### General Weather Summaries for 2008

Average monthly temperature (Departure from Normal)	Louisville	Lexington	<b>Bowling Green</b>
January	34.7 (+1.7)	32.3 (+0.3)	34.7 (+0.5)
February	37.5 (-0.1)	35.5 (-0.9)	39.7 (+1.1)
March	46.5 (-0.4)	44.1 (-1.5)	47.9 (+0.1)
April	57.9 (+1.5)	54.6 ( 0.0)	56.3 ( -0.5)
May	64.8 (-1.0)	61.3 (-2.5)	65.2 (-0.6)
June	78.5 (+4.3) *3	73.8 (+1.6)	77.3 (+2.9)
July	79.8 (+1.4)	75.6 (-0.5)	78.2 (-0.3)
August	78.8 (+1.8)	74.5 (-0.3)	76.9 (+0.1)
September	73.8 (+3.7) *6	71.5 (+3.5)	72.9 (+3.3)
October	59.7 (+1.2)	57.2 (+0.6)	58.8 (+0.9)
November	45.5 ( -2.1)	42.8 ( -3.1)	44.9 ( -2.5)
December	37.5 (-0.1)	35.8 (-0.5)	39.4 (+1.1)
Total year	57.9 (+1.0)	54.9 (-0.3)	57.7 (+0.5)

<sup>\*......</sup>Rank within the top 10 warmest months on record.

<sup>\*......</sup>Rank within the top 10 coldest months on record.

Monthly precipitation	Louisville	Lexington	Bowling Green
(Departure from Normal)			
January	2.92 ( -0.36 )	4.42 (+1.08)	3.82 ( -0.33 )
February	4.87 (+1.62)	5.76 (+2.49)	3.79 ( -0.36 )
March	8.97 (+4.56) *5	6.30 (+1.89)	6.37 (+1.40)
April	6.13 ( +2.22 )	5.89 (+2.22)	4.90 (+0.91)
May	5.69 ( +0.81 )	4.40 ( -0.38 )	5.38 ( +0.02 )
June	3.16 ( -0.60 )	3.59 ( -0.99 )	1.20 ( -3.09 ) *7
July	3.83 ( -0.47 )	3.41 ( -1.40 )	5.52 ( +0.98 )
August	0.63 ( -2.78 ) *3	2.18 ( -1.59 )	0.74 ( -2.62 ) *3
September	1.31 ( -1.74 )	1.42 ( -1.69 )	1.58 ( -2.55 )
October	2.26 ( -0.53)	1.53 ( -1.17	3.75 ( +0.58)
November	1.84 ( -1.97)	2.53 ( -0.91)	1.72 ( -2.74)
December	5.18 (+1.49)	6.03 (+2.00)	6.11 (+1.05)
Total year	46.79 (+2.26)	47.46 (+1.55)	44.88 (-6.75)

<sup>\*......</sup>Rank in the list for top 10 driest months.

<sup>\*......</sup>Rank in the list for the top 10 wettest months.

Miscellaneous	Louisville	Lexington	<b>Bowling Green</b>
Highest temperature	97 on July 20, Aug	94 on July 21	97 on July 21
	23, and Sept 1		
Lowest temperature	5 on December 22	3 on December 22	7 on December
			22
Yearly maximum sustained	53 mph on Sept 14	47 mph on Feb 6	39 mph on Jan
winds			29
Yearly maximum wind gust	75 mph on Sept 14	60 mph on Feb 6, Sept	59 mph on Jan
		14	29
Wettest Day	2.55" on April 3	2.95" on April 4	2.44" on March
			19
Snowiest Day	6.1" on March 8	4.0" on March 8	3.0" on March 8
Deepest Snow Depth	6" March 8-9	4" on March 8	3" on March 8

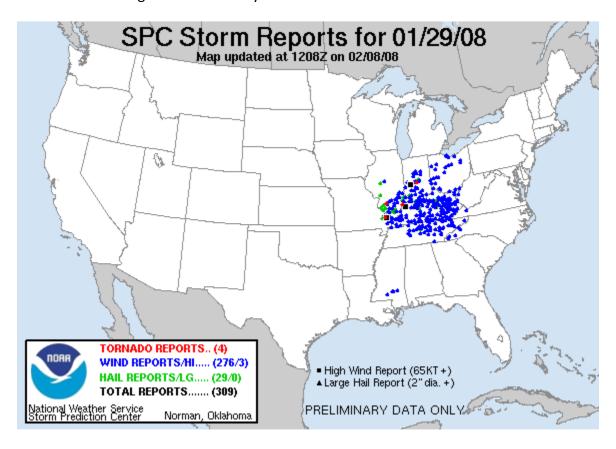
Daily Records Set in 2008		
Location	Date	Record Set
Bowling Green	January 7	59, record warm low
Lexington	January 7	70, record high
Lexington	January 7	57, record warm low
Louisville	January 7	63, record warm low
Bowling Green	January 8	69, record high
Louisville	January 8	70, record high
Bowling Green	February 5	64, record warm low
Lexington	February 5	56, record warm low
Louisville	February 5	58, record warm low
Bowling Green	February 6	69, record high
Bowling Green	February 6	1.30", record precipitation
Lexington	February 6	1.39", record precipitation
Louisville	February 6	70, record high
Bowling Green	February 26	0.5", record snowfall
Bowling Green	March 7	2.0", record snowfall
Louisville	March 7	4.3", record snowfall
Bowling Green	March 8	3.0", record snowfall
Bowling Green	March 8	3", record snow depth
Lexington	March 8	4.0", record snowfall
Louisville	March 8	6.1", record snowfall

Louisville	March 9	6", record snow depth
Louisville	March 11	3", record snow depth
Bowling Green	April 3	1.80", record precipitation
Lexington	April 3	1.88", record precipitation
Louisville	April 3	2.55", record precipitation
Lexington	April 4	2.95", record precipitation
Lexington	April 29	45, record cold high
Bowling Green	June 4	76, record warm low
Louisville	June 4	79, record warm low
Bowling Green	June 5	77, record warm low
Louisville	June 5	76, record warm low
Bowling Green	June 6	74, record warm low
Louisville	June 6	94, record high
Louisville	June 7	78, record warm low
Lexington	August 11	53, record low
Bowling Green	October 7	1.39", record precipitation
Louisville	October 12	87, record high
Bowling Green	November 20	Trace, record snowfall
Bowling Green	December 1	Trace, record snowfall
Lexington	December 16	2.5", record snowfall
Louisville	December 16	0.3", record snowfall
Bowling Green	December 19	72, record high
Louisville	December 19	69, record high
Lexington	December 24	1.97", record precipitation
Bowling Green	December 27	71, record high
Bowling Green	December 27	63, record warm low
Lexington	December 27	70, record high
Lexington	December 27	56, record warm low
Louisville	December 27	71, record high
Louisville	December 27	61, record warm low

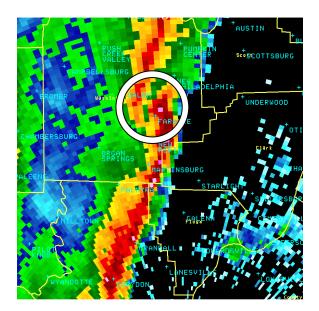
### Significant Weather Events of 2008

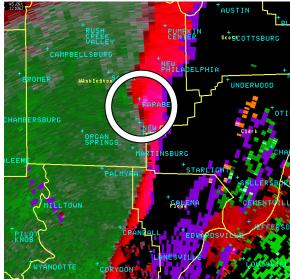
Severe weather struck early in 2008, with the year's first tornado touching down in Barren County on **January 10**. An F1 storm developed that afternoon just south of Park City and destroyed several barns. Also, we received a <u>video</u> of the hail that fell in Park City as the twister roared by to the south.

Less than three weeks later a powerful squall line swept through southern Indiana and central Kentucky, spawning four tornadoes on the evening of **January 29**. One of these tornadoes, while only of F1 strength, destroyed a mobile home near Henryville, Indiana, killing the occupant. Wind gusts of 100 mph were reported in Washington County, Indiana, which turned out to be the strongest winds of the year.



Below are radar images of a tornado near Farabee in southeast Washington County, Indiana on January 29:

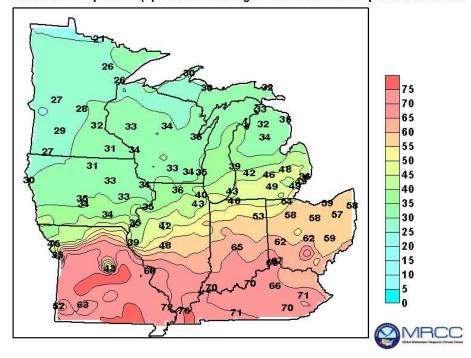




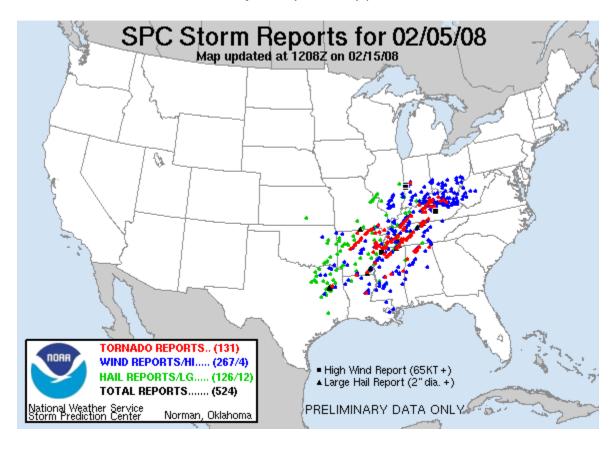
Area residents barely had time to clean up from the January storms when a prolific tornado and severe weather outbreak took place on the night of **February 5-6**. No fewer than 16 tornadoes tore across central Kentucky, making it one of the largest tornado outbreaks we have ever seen here. The outbreak included two EF3 tornadoes in Allen, Monroe, and Cumberland counties, which were the strongest tornadoes of the entire year. The EF3 in Allen County caused four deaths in the Amos area. The EF3 tornado that tore from Monroe into Cumberland County was the year's most expensive storm, resulting in nearly four million dollars in damage.

In addition to the tornadoes, straight-line winds accompanied a very strong cold front, and created more damage across the region. The year's strongest winds, gusting to 100 mph, caused great damage in Nicholas County.

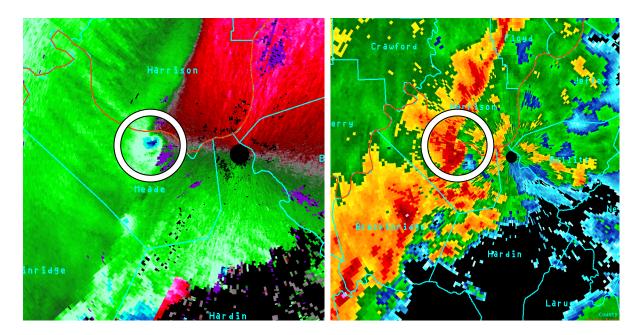
Maximum Temperature (F) valid the morning of 02/05/2008 for the previous 24 hours



Unusual warmth for early February preceded the outbreak.



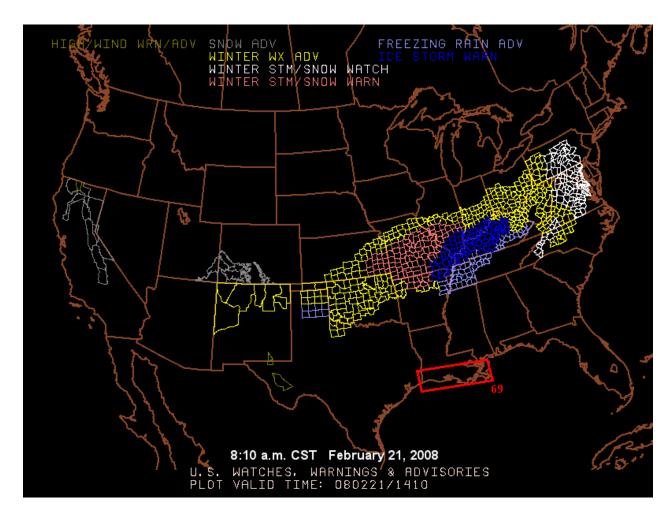
Severe weather was widespread throughout the southeast United States.



The images above show the tight rotation of an EF-2 tornado that moved through Brandenburg on the evening of February 5. Bright blue shows winds of over 60 mph moving towards the radar. This circulation, not present just 10 minutes prior to this image, formed at the apex of a reflectivity notch noted in the left image.

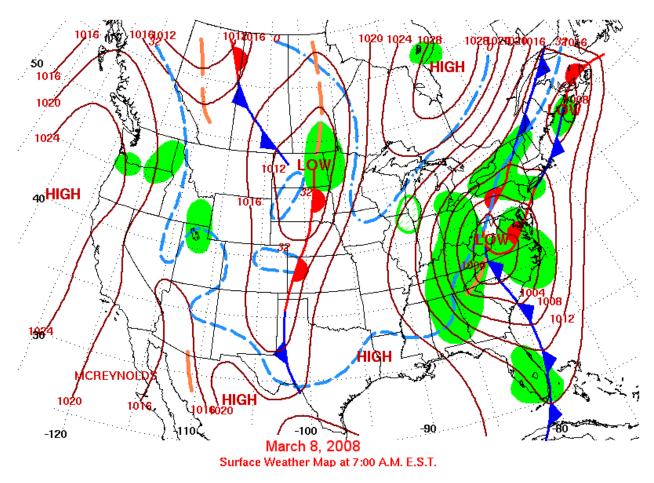
Winter weather returned for the rest of February. On **February 11-12** a swath of up to five inches of snow was aligned along the Ohio River. Then on **February 21** an ice storm struck the region, bringing significant amounts of ice to southern Indiana and northern Kentucky.



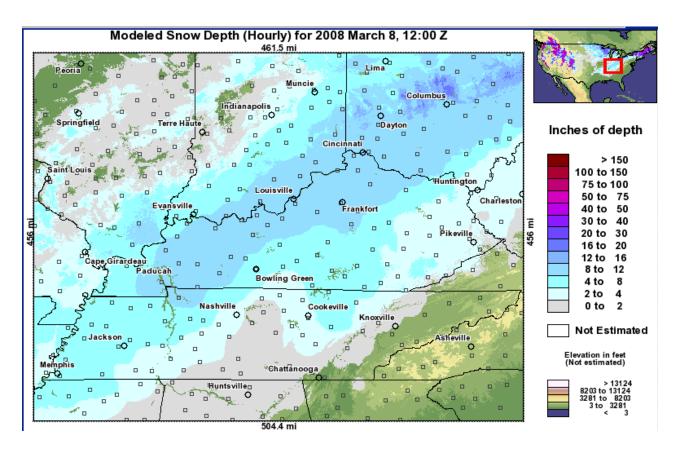


Note the many winter weather watches, warnings, and advisories, including the Ice Storm Warning for southern Indiana and central Kentucky on February 21.

The topsy-turvy year continued into March. We had significant severe weather outbreaks in January and February, and then an equally unusual snowstorm in March! On **March 7-8** snow fell throughout Kentucky and southern Indiana, including up to a foot of accumulation along and either side of the Ohio River, with Louisville getting the highest amounts.

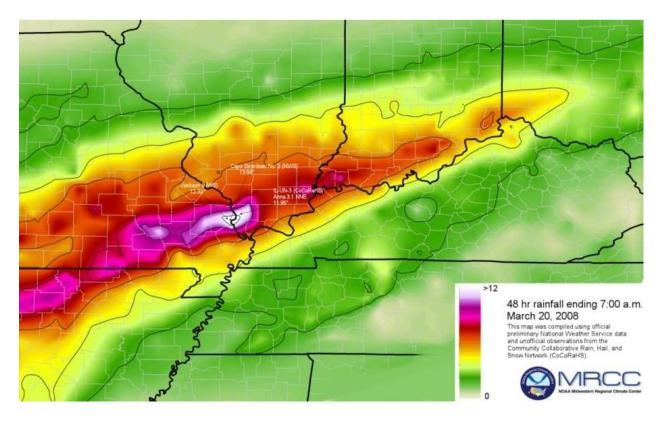


The surface map on the morning of March 8 shows the eastern storm system that dumped heavy snow on the Ohio Valley.

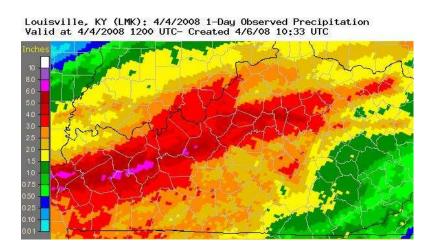


A band of snow up to a foot deep stretched from western Kentucky into Ohio.

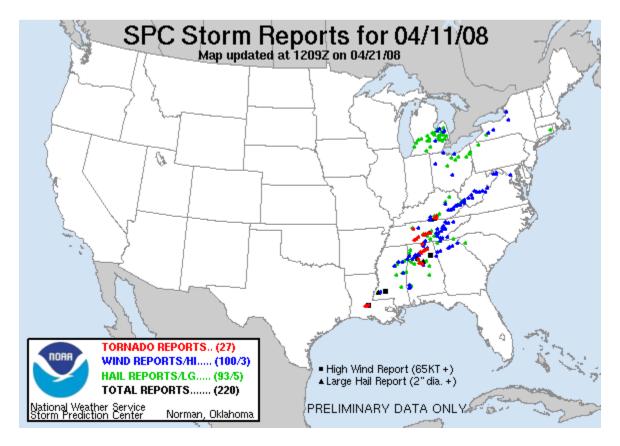
Temperatures warmed quickly after the early March snowstorm, melting the snow and saturating the ground. Then on **March 18-20**, heavy rains swept into the area from the southwest, drenching southern Indiana in three to six inches of rain and resulting in significant flooding.



Another round of heavy rain followed on **April 3-4**, though the heaviest rain was shifted a bit to the south over central Kentucky. April 3 and 4 were the wettest days of the year in Louisville and Lexington, and set daily record rainfall totals.



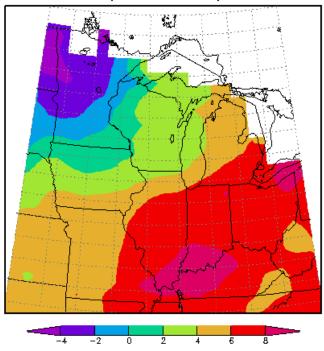
The extreme southeast corner of the Louisville NWS office's area of responsibility was visited by a supercell thunderstorm on **April 11** that produced four tornadoes in Clinton County. Two of the tornadoes were EF1's and the other two were EF2's. In addition to the tornadoes, the largest hailstones of the year pummeled Clinton County, with diameters up to 2.75 inches!



Summer heat arrived in full strength somewhat early, with temperatures during the first week and a half of June soaring into the 90's. On **June 9** the temperature at Louisville rose to 95 degrees, with Bowling Green reaching 94 and Lexington topping out at 91.

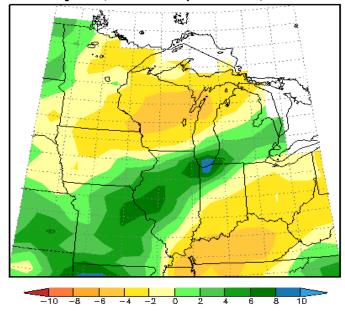
Though the summer of 2008 was not nearly as hot as 2007, drought conditions did begin to develop by late August, and became severe in the southeast by mid-September. By the middle of October drought had reached extreme proportions in the Lake Cumberland area. It would take until December before the drought would begin to alleviate.

Average Temperature Departure from Mean in Degrees F June 1, 2008 to June 9, 2008

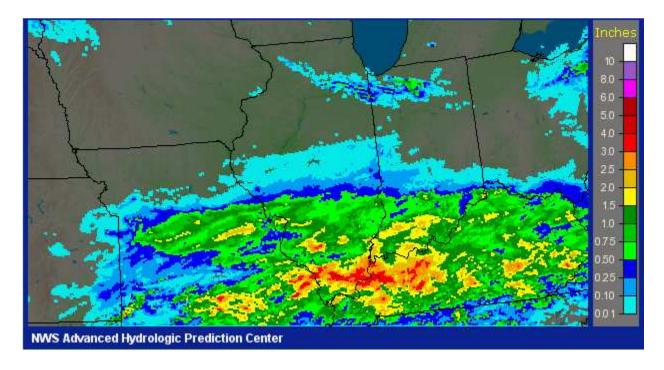


Midwestern Regional Climate Center Illinois State Water Survey Champaign, Illinois

Total Precipitation Departure from Mean in Inches August 1, 2008 to September 30, 2008



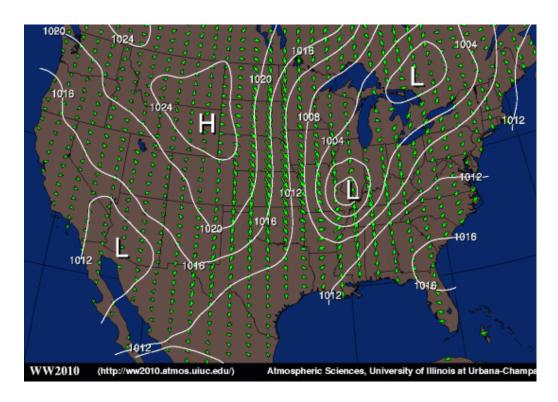
NOA4 Midwestern Regional Climate Center Illinois State Water Survey Champaign, Illinois Hurricane Dolly charged ashore at Brownsville, Texas in late July and brought heavy rain to the Ohio Valley **July 30-31**. It was the last widespread heavy rain the area would see for about four months.



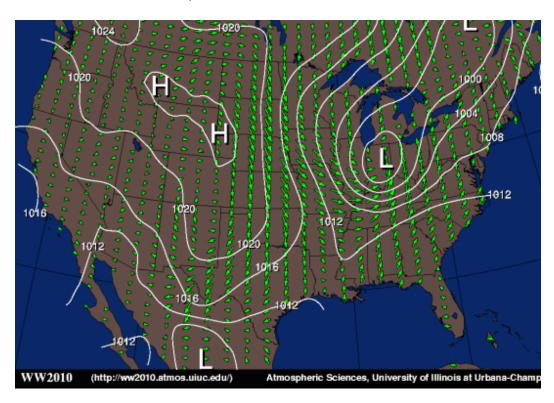
Above, note the heavy amounts of rain reaching from Missouri into Kentucky. Central Kentucky west of Interstate 65 received up to three inches of rain.

Usually remnants of a tropical system bring beneficial rains to southern Indiana and central Kentucky in the dry late summer and fall months. Unfortunately, the remains of Hurricane Ike brought no rain, and instead caused ferocious winds to howl through the region on **September 14**. Four fatalities occurred from falling limbs, thousands of power lines were torn down, and countless trees were damaged or destroyed. It caused the largest blackout in Louisville history, with some residents in the dark for more than a week following the tempest. Winds gusted to hurricane force at Louisville International Airport.

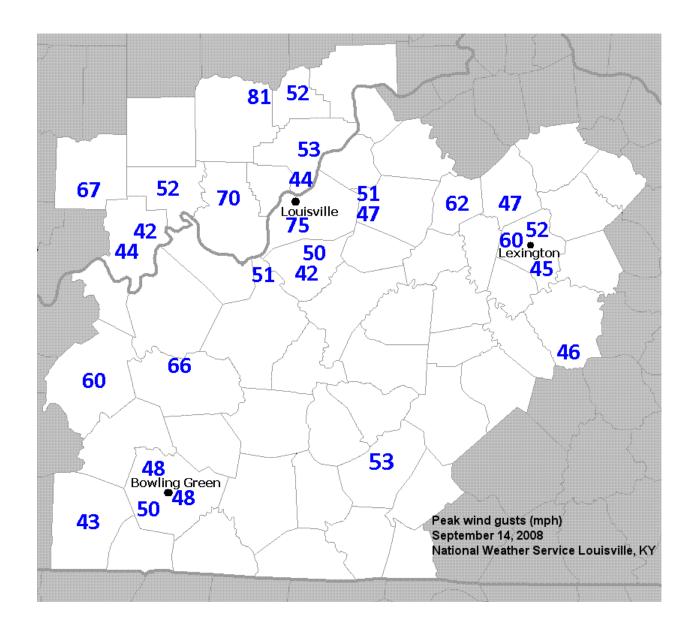
Hurricane Ike came ashore earlier in September at Galveston and severely damaged Houston. The remnant circulation then began its transition to an extratropical cyclone and accelerated across the Missouri Bootheel. Low pressure rapidly moved across southwestern Indiana and over Indianapolis. Winds around 50 mph with gusts above 70 mph brought tremendous damage along and north of the Ohio River.



The remains of Ike show up on the morning weather map on September 14 as a low pressure system over southern Illinois.



By lunch time the low had advanced to northeastern Indiana!



The weather for the last few months of the year was relatively quiet. October and the first half of November were dry and quite warm. Colder air set in for the second half of November and much of December. Rains returned to the region in December, along with several small winter storms that produced icing and spotty light snows.

## The Year in Pictures



Tornado destruction near Henryville, Indiana on January 29. Photo: NWS



A tornado destroyed this car in Saint Matthews, Kentucky, on January 29. Photo: Michael Scott Howard



Tornado damage in Elizabethtown, Kentucky, on February 5. Photo: NWS



A tornado speared this car in Harrodsburg, Kentucky, on February 6. Photo: NWS



A tornado in Franklin County shot these boards right into the ground on February 6. Photo: NWS



A child's doll in the destruction left behind by a killer tornado in Allen County on February 6. Photo: Matt Pedigo of the Scottsville Citizen-Times



Animals suffered in Allen County on February 6 as well. Photo: Matt Pedigo, Scottsville Citizen-Times



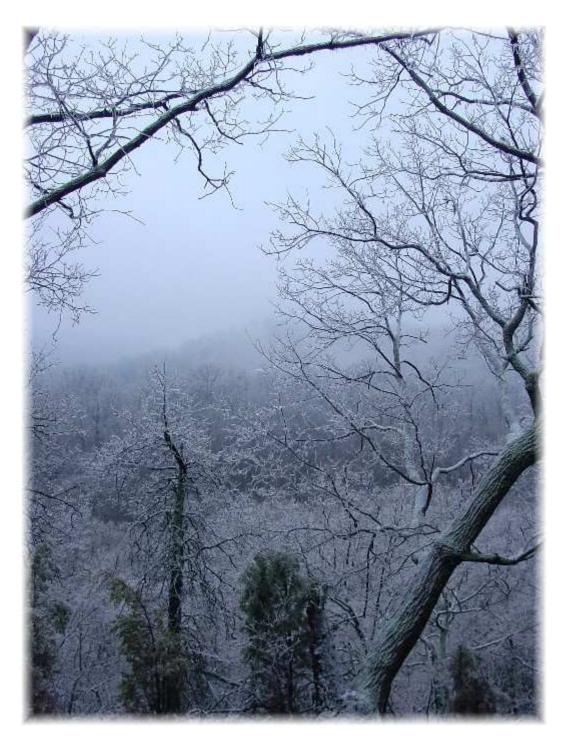
Homes in Allen County were swept away in the middle of the night on February 6. Photo: Matt Pedigo, Scottsville Citizen-Times



Massive tracts of forest were laid to waste in Allen County on February 6. Photo: Matt Pedigo, Scottsville Citizen-Times



Ice in Crawford County on February 12. Photo: Wade Bell



Ice in Jefferson Memorial Forest on February 22. Photo: Tony Bright



Flooding in Sadieville, Kentucky on March 4. Photo: Michael Halcomb



Sawyer State Park in Louisville on March 8. Photo: NWS



Carefree, Indiana on March 8. Photo: Wade Bell



On Route 66 in Crawford County March 8. Photo: Wade Bell



Flooding in Milltown, Indiana on March 21. Photo: Wade Bell



Flooding in Milltown, Indiana on March 21. Photo: Wade Bell



Flooding in Frankfort on April 4. Photo: Donna Mitchell



Tornado damage in Clinton County on April 11. Photo: NWS



The year's biggest hail fell in Clinton County on April 11. Photo: Aliea Garner



Funnel cloud near Bedford, Kentucky, on June 3. (Photo credit unknown)



Lightning in Crawford County on June 26. Photo: Wade Bell

The remnants of Hurricane Ike were felt throughout Louisville on September 14. Photos: Mike Howard.





Such widespread wind damage was unprecedented in Louisville. Photos: Mike Howard





Corydon, Indiana, was not spared Ike's wrath on September 14. Photos: Alan Stewart



