2008 Top 5 Weather Events

Just as in national and world events, the year 2008 was also a headline-grabber weatherwise. In fact, the normal Top-Five weather events that usually round out the year had to be increased to the Top-Seven weather events for east Kentucky. For the second year in a row, the lack of precipitation continued to have the greatest impact with millions of dollars in damage to the agricultural community, serious stress on communities that were running short on drinking water, and even the personal property losses as expensive landscaping died from the prolonged drought. The spring severe weather season arrived early as two February tornadoes set the stage for severe weather to continue into May. The strongest tornado to hit eastern Kentucky since June of 2001 roared across Wayne County in April. Winter was not to be outdone as it had a high impact across east Kentucky with at least two events during the late fall and early winter season. As active as the past weather-year has been, we can only surmise that the upcoming year of 2009 will continue the headline-grabbing trend with weather events sometimes topping the world and national events.

5. January 29th Wind Event

The end of January brought a severe wind event that seemed to foreshadow the months to come as numerous severe weather episodes would follow. A very strong cold front, with temperatures in the mid 50s ahead and in the 20s behind, raced across east Kentucky on the evening of January 29th. A line of strong storms formed just ahead of the cold front and moved from west to east at 40 to 50 mph, producing widespread winds of 50-60 miles per hour. The storm system was near Somerset and Flemingsburg at just after 10 pm and had already reached Pikeville by midnight. Around 50 reports of damage were received by the National Weather Service office in Jackson, with one minor injury as a guard shack was blown over in Pike county. Various weather instruments across east Kentucky were able to measure wind speeds as the storm passed. Here are a few of the strongest measurements:

LONDON CORBIN AIRPORT.....62 MPH
MONTICELLO AIRPORT.....51 MPH
MIDDLESBORO AIRPORT.....51 MPH
TRIANGLE MOUNTAIN RAWS
NEAR MOREHEAD.....49 MPH
BIG SANDY RAWS
IN MARTIN COUNTY.....47 MPH
FLEMING - MASON COUNTY AIRPORT.....46 MPH
MOREHEAD MESONET STATION.....45 MPH
KOOMER RIDGE RAWS
IN WESTERN WOLFE COUNTY.....45 MPH
JACKSON NATIONAL WEATHER SERVICE.....45 MPH
PIKEVILLE - PIKE COUNTY AIRPORT.....37 MPH

***The 62 MPH gust at London was the strongest gust ever recorded at that location, besting the old record of 59 mph set back on May 24th 2004.**

4. Super Tuesday Tornado Outbreak

On February 5th and 6th, just over a week after the first severe weather outbreak of the season, the second one struck doing arguably the most overall damage of any severe event this year. That being said, east Kentucky was spared the worst part of this massive storm, known as the Super Tuesday tornado outbreak, so named because primary elections were in full swing across many states. The Mississippi River valley and lower Ohio River valley had to endure an onslaught from over 80 tornadoes, causing 57 fatalities and numerous injuries during a 16 hour time frame. Severe weather did not reach east Kentucky until early Wednesday morning, where it caused 2 weak tornadoes and around 60 reports of wind damage and hail. The first tornado touched down near Stepstone in Bath county at 2:06 AM and produced winds around 105 mph, which is EF-1 strength. The tornado was on the ground for just over 8.5 miles and, at its widest, was approximately 250 yards. The second tornado touched down just 21 minutes later near Deniston and Korea in Menifee county producing a weaker EF-0 tornado with winds near 85 mph. This tornado was on the ground for 4 miles and was approximately 150 yards wide. Several mobile homes, barns, and trees were damaged by the two tornadoes; thankfully no injuries were reported. Overall, the entire state of Kentucky saw 25 tornadoes which made this the largest tornado outbreak since 1974.

Menifee County

3. Mother's Day Severe Weather Outbreak

Mother's Day 2008 was hampered by an outbreak of severe weather that caused widespread wind damage, large hail, and two EF-1 tornadoes. What was unique about this severe weather episode is that it happened just after daybreak. Normally, severe weather occurs in the late afternoon or early evening since thunderstorms need to thrive off of the heat of the day. It is rare to see an airmass unstable enough to produce severe weather that early in the morning. The first reports of severe weather were received at 7:45 AM EST in Pulaski county, and the first tornado was reported in McCreary and Whitley counties at 9:15 AM. This tornado touched down just west of Cumberland Falls State Park then moved east where the park supervisor's residence was badly damaged. Winds with this tornado were estimated at 105 mph and the path width was, at its widest, approximately 400 yards. The second tornado occurred just south of Wooten in Leslie county just over an hour later. Wind speeds with this tornado were near 95 mph with mainly trees being damaged. The National Weather Service Office in Jackson received around 45 reports of wind and hail damage, with some hail stones the size of golf balls being reported in Rowan, Leslie, and Floyd counties.

Cumberland Falls State Park

2. Wayne County EF-2 Torando

On April 11th, 2008, a strong tornado moved across portions of Wayne County causing severe damage to nearly 40 structures and completely destroying two mobile homes. The tornado came from a long lived supercell thunderstorm that started in north central Tennessee and tracked across east Kentucky and West Virginia producing severe weather all along the way. This tornado was rated on the high end of the EF-2 range with winds up to 130 mph. This rating made the tornado the strongest in east Kentucky since an EF-2 tornado struck London in 2001, which was roughly the same strength. The tornado entered Wayne county from Clinton county at 1:50 PM and proceeded for seven more miles to the east-northeast before lifting around Old Sportsman Club Road. Although extensive damage was done to many structures, only one minor injury was reported. Along with the tornado, almost 30 wind damage and hail reports were relayed from across all of Eastern Kentucky to the National Weather Service Office in Jackson during this event. The largest hailstones reported were the size of half dollars.

Wayne County EF-2

Mobile Home Destroyed in Wayne County

1. The Drought Continues

Despite all the wild weather we had over the past year, we did not receive enough precipitation, frozen or liquid, to get rid of the moderate to extreme drought. In fact, both the Jackson National Weather Service and the London Corbin Airport experienced below normal precipitation 9 of the 12 months this year. Furthermore, 8 of the 9 months that were below normal recorded deficits of greater than 1 inch. An especially brutal stretch of dry weather came from August through November where east Kentucky set many records for a lack of precipitation. A table below lists the drought highlights from the Jackson Julian Carroll Airport and London Corbin Airport for the year:

Jackson (records date back to 1981)

Month

***This January was the 8th driest on record.**
*** This June was the 10th driest on record.**
***This August was the driest on record and the 9th driest month ever recorded.**
***This September was the 2nd driest on record and the 3rd driest month ever recorded.**
***This October was the 4th driest on record.**
***This November was the 10th driest on record.**

Season

***This fall was the 3rd driest on record.**
***This spring was the 6th driest on record.**
***This summer was the 9th driest on record.**

Annual

***2008 was the 9th driest year on record.**

Miscellaneous

***Jackson experienced the driest August through October ever**
***The first 6 months of the year experienced the 9th driest start ever.**

London (records date back to Nov 1954)

Month

***This June was the 10th driest on record.**
***This September was the driest on record and the 3rd driest month ever recorded.**
***This October was the 4th driest on record.**

Season

***This summer was the 9th driest on record.**
***This fall was the driest on record.**

Annual

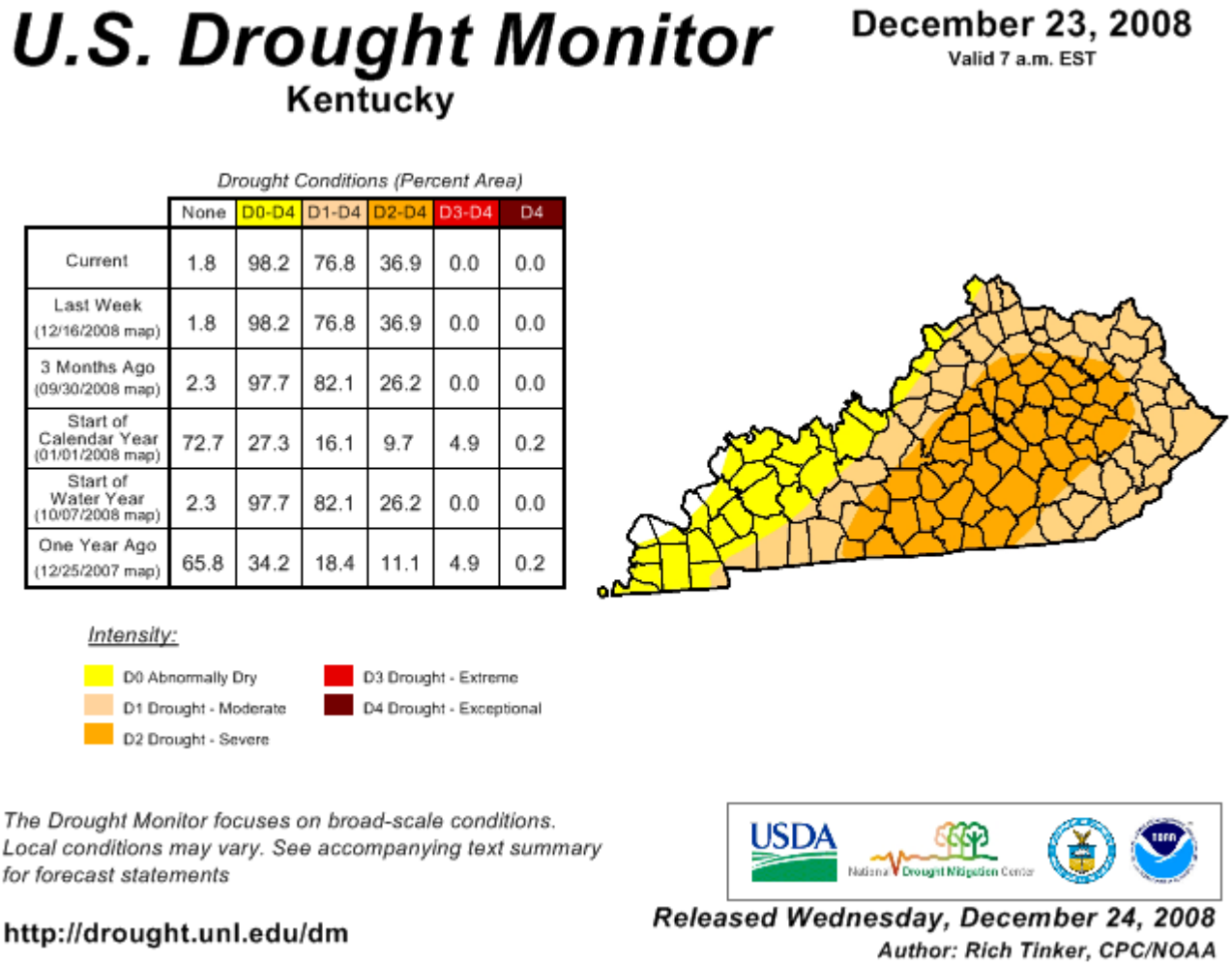
***2008 was the 4th driest year on record.**

Miscellaneous

***London recorded the 7th longest streak of no measurable rainfall at 18 days.**
***London experienced the driest May through October ever.**

By the end of October, the United States Drought Monitor had listed east Kentucky in severe (D2) to extreme (D3) drought conditions once again. Relief finally came this December as some very beneficial 1 inch plus rainfalls occurred. In fact, this December will end up nearly 3 inches above normal at Jackson, putting a small dent in the damage done from late Summer into early Fall. The latest U.S. Drought Monitor has reflected this improvement with Moderate (D1) to Severe (D2) hydrologic drought conditions across east Kentucky.

The outlook for the start of 2009 shows the potential for the drought to persist or get worse as the precipitation outlook issued by the **Climate Prediction Center** calls for near normal precipitation from January through March.



The latest U.S. Drought Monitor