Around 11:55 pm.
Numerous homes, cabins, campers, outbuildings and small cottages were heavily damaged or destroyed by this tornado which extended along an 11 mile path west of the State Fishing Lake. Tragically, this tornado was also responsible for five injuries and one fatality. The supercell produced two more tornadoes after it had been absorbed into the aforementioned squall line. Both tornadoes were rated EF-1. (Continued on Page 6…)

Precipitation totals were generally below normal across north-east Kansas this summer and early fall, save for an exceptional amount of rain that fell during early May, and a moderately wet spell that hit near the end of September and beginning of October. Sites across east central Kansas received the greatest amount of precipitation during the early summer, while north central portions of the area remained relatively dry. By late summer the opposite proved true when north central Kansas received and abundance of precipitation, and east central Kansas was left relatively dry. Temperatures were generally above normal through the period. Several heat waves brought hot and humid weather to the region during the summer months. The first 90 degree day at Topeka for 2007 occurred on June 7th. Several 100 degree days were recorded, and 2007 featured one the warmest Augusts on record. Also, the second longest streak of warm low temperature read-
(Continued on Page 2…)
-ings greater than 70 degrees extended for 28 days from late July through the middle of August. Several individuals across the area were reported to have experienced heat-related illnesses according to local emergency rooms. At least one death in Topeka was partially attributed to the extreme heat. The Climate Prediction Center has issued an outlook stating that there is a 40% to 50% chance for above normal temperatures this upcoming winter for much of northeast Kansas. There are equal chances this upcoming winter for precipitation to be above, below, or near normal. For more information, please visit the Climate Prediction Center website at: http://www.cpc.ncep.noaa.gov/

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Storm Based Warnings Implemented

“A smaller geographic area enclosed by a warning will reduce the number of individuals warned. But, more specific warnings will encourage citizens to take each warning even more seriously.”

NWS Offices across the country have officially begun to issue warning products on a storm-to-storm basis. What does this mean?

• Storm warnings will no longer be based on geopolitical boundaries. Instead, forecasters will draw specific warning polygons that directly correspond to the path of a storm. Warning products will now specify the portion of a county that will be affected by the storm.

• More specific warnings will result in fewer total individuals warned. False alarm rates will be significantly reduced. The significance of issued warnings will heighten, warnings will become more meaningful.

• All products will still be supported by local media outlets. Storm based warnings will have the technology to be uploaded to more electronic devices—including cell phones and PDAs, and will have an increased presence on the web.

Three simultaneous tornadoes within line of severe thunderstorms

Previously

County-Based Tornado Warnings
8 Counties under warning
Almost 1 million people warned

Currently

Storm-Based Tornado Warnings
70% less area covered
~600,000 fewer people warned

Scientists with the Climate Prediction Center believe that moderate La Nina conditions will continue to develop over the next few months.
• A major Flash Flood and Flood event set-up over East Central Kansas June 28th through 30th. Storm total rainfall amounts across Coffey, Anderson, Franklin, and Osage Counties were in the double digits—including sites across Anderson County that saw 20 inches of rain (see graphic at left).

• July 4th. Severe weather dampened the Independence Day plans of citizens across the state. Heavy rain and hail pounded Wabaunsee, Dickinson, and Pottawatomie Counties, while 60 to 70 mph blew across Jefferson, Shawnee, Riley, and Douglas Counties. Several funnel clouds were also reported when gusty winds were wrapped up into scattered thunderstorm updrafts.

• August 16th and August 20th. Discrete thunderstorms produced fairly widespread ravaging severe wind gusts across north central Kansas.

• August 23rd. The largest hailstones to have fallen in the Topeka County Warning Area so far this year were reported. Stones up to the size of baseballs fell in the town of Hanover in Washington County.

Winter Weather Season is fast approaching. To prepare for the impending cold temperatures and freezing precipitation:

- Talk with your family to develop an emergency plan. Keep emergency phones numbers near phones in your home, and also in your car. Establish a contact point where everyone can congregate should you become separated during a storm.
- Create a preparedness kit for both your home and your car. Include a cell phone, flashlight, batteries, blankets, extra clothing, high calorie/non-perishable food, a supply of water, and matches. In addition, have road maps, a shovel, sand or kitty litter, a windshield scraper, and a tow rope available in your car. Have a contact person in mind whether at home or while traveling who knows your plans to travel or stay home in the event of a winter storm. A battery powered All-Hazards NOAA Weather Radio will keep you up to date on all winter storm information.
- Third, be ready to report adverse weather conditions to the National Weather Service at Topeka by visiting our website at www.weather.gov/topeka, or calling us at 1-800-432-3929. If winter hazards such as heavy snow, strong winds, freezing rain, or flooding affects you, your report will help to improve our forecasts and refine our watch and warnings products.
Before the first snowflakes of the season begin to fall, take a few minutes to brush up on best snowfall measurement practices. Three values are essential to every observation: 1. The amount of snowfall since the last observation. 2. The depth of snow since the last observation. 3. The water equivalent of the snowfall since the last observation.

First, Prepare for the season:

1. Remove the funnel and inner measuring tube of standard 8” rain gauges in order to more accurately collect freezing precipitation.

2. Place at least 2 white snowboards out, and mark them with brightly colored flags. Attempt to place snowboards in a relatively open location, away from shady areas, trees, buildings, or other obstructions.

3. Make sure there are no leaks in your gauge. If there is a problem, contact Bill Newman at bill.newman@noaa.gov or 1-800-432-3929. If not, you should be ready to measure snow!

To Measure Snowfall:
- Use a ruler, and record the depth to the nearest tenth of an inch. This snowboard should be cleaned off after every observation.

To Measure Snow Depth:
- Use a ruler, and record the depth to the nearest whole inch. This snowboard should never be cleared off after an observation. If you have several snowboards, calculate the average depth from several locations.

To Measure the Water Equivalent of Snowfall:
- Melt the contents of the 8 inch rain gauge. Using funnel, pour the liquid into the inner measuring tube (kept indoors) and measure just as you would for rainfall to the nearest hundredth of an inch.

Other Local Events

Women in Science Day 2007, an event sponsored by the National Weather Service in Topeka, The Topeka Zonta Club, Washburn University, and the Sunflower Association for Women in Science, was developed to provide local middle-school aged females with the chance to explore education and career opportunities in science and technology. Several members of the NWS-Topeka and NWS-Pleasant Hill/Kansas City were on hand to assist with the day’s activities. 225 girls from across northeast Kansas participated in several lab activities that focused on different aspects of science and technology, including biology, astronomy, communication, hydrology, and geology. The keynote speaker, Dr. Barb Quaney, spoke of the ways that science and technology shaped her education and eventually helped to get a job as a occupational therapist and researcher. The event was a tremendous success. Each of the students also received a free t-shirt. For information on “Women in Science Day, 2008” please watch the NWS-Topeka homepage at www.weather.gov/topeka for information as it becomes available—primarily during the spring and summer of ‘08.
Recent Local Events

Three Cooperative Observers that record temperature and precipitation data daily for the NWS at Topeka received National Awards this past summer.

- **Bill and Shirley Driscoll** of Rossville, KS and **Melba Bruce** from Minneapolis, KS received the distinguished Holm Award for outstanding service in the Cooperative Weather Observer Program. Each year, only 25 of these awards are presented nationally, and the NWS-Topeka office was fortunate enough to have 2 awarded locally! Congratulations to the Driscolls, and to Melba Bruce.

Several other observers have also received awards recently.

- **Kansas State University** and the **University of Kansas** each received 50 Year Honored Institution Awards.
- **Leo and Nancy Pollard** of Lecompton, KS received the 25 Year Length of Service Award.
- **Carol Linden** of Lebo, KS received a 15 Year Length of Service Award.
- **John Foster** of Eskridge, KS, **Debra Kruse** of Bremen, KS, **Clair Kopsa** of Agenda, KS, and **Kevin Foerschler** of Woodbine, KS all received 10 Year Length of Service Awards.

Franklin County became a **StormReady Community** on August 22. Meteorologist in Charge Ken Harding and Warning Coordination Meteorologist Jennifer Stark were on hand for the presentation. The StormReady designation is part of a nationwide community preparedness program that uses a grassroots approach to help communities develop plans to handle local severe weather and flooding threats. There are now more than 1,100 Storm-Ready communities across the country.

Other Local Events

Scott Blair, a meteorologist with the National Weather Service in Topeka recently attended the Topeka Water Festival. Federal State, County, and Local Emergency agencies were also present. The event was held to raise awareness and promote preparedness in the event of a natural disaster or emergency. At left, Scott shows local grade school students the “Tornado Machine” and explains the concept of tornado development and what to do if a tornado is spotted near their home.

Over the past few months, several NWS-Topeka employees have retired. Congratulations!

**Recently Retired:**
- Curt Holderbach- Meteorologist in Charge
- Doug McHatton- Electronics Systems Analyst
- Steve Kays- Lead Forecaster

Also, please help us welcome a few new faces!

**New to the Office:**
- Ken Harding- Meteorologist in Charge
- Marion Smith- Administrative Support Assistant
- Scott Blair- Journeyman Forecaster
- Michael Teer- Electronics Systems Analyst
- Scott Watson- Service Hydrologist
ties affected. Some of the most concentrated damage occurred in Clay County, where 35 residences sustained damage.

The most widespread event of the weekend was the extensive flooding which affected almost all of Northeast Kansas. From an area roughly along and southeast of a Minneapolis to Marysville line...and along and northwest of the Kansas Turnpike, locations received anywhere from 4 to 9 inches of rain during the 48-hr period of 7am May 5th to 7am May 7th. This heavy rainfall caused nearly every river basin in the area to rise above flood stage. The heavy rainfall also contributed to a few notable flash flooding incidents. The picture above is the result of flash flooding near Ft. Riley, where flood waters weakened a trestle which collapsed as a train tried to cross. In Topeka, significant flash flooding along the Shunganunga Creek stranded nearly 500 residents. City and county officials needed to perform numerous water rescues before dawn on May 7th. Much of Southern Shawnee County was inundated with flood waters. The entire town of Wakarusa was inundated with floodwaters, leaving homes across the town virtually underwater. Several residents needed to be rescued from their rooftops. Significant flooding continued in northern Osage County where at one time Burlingame was completely isolated because water covered every road in or out of town.

Without the help of emergency management, local, county and state emergency officials and the entire Northeast Kansas Storm Spotter Network, the severe weather of May 5th-7th could have injured or killed many more people. Thanks to all those who worked hard to ensure public safety.