

www.mesonet.org

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# connection

New Mesonet Agriculture Website

-by Stephanie Bowen

**The Oklahoma Mesonet** is proud to announce the new Agriculture section of the Mesonet website, formerly the *AgWeather* website. The Agriculture section is easy to find by clicking the "Agriculture" tabe in the top menu of the Mesonet website, www.mesonet.org.

New features include a Farm Monitor on the home page. It gives a quick review of conditions on the farm from the nearest Mesonet site. Products featured on the Farm Monitor include current conditions, two days of forecast, Cattle Comfort, Evapotranspiration, Dispersion, Peanut Leaf Spot, and Pecan Scab. Also available on the home page are quick links to popular Agriculture products. They are located in the left menu under Agriculture Essentials. Products like the Cattle Comfort Advisor, Drift Risk Advisor, and Irrigation Planner can be found there.

The new Agriculture section offers products in an easierto-use format. By scrolling over the top sub-menus – Crop, Horticulture, Livestock, Range/Forest, and Learn More – you can quickly visit the section best suited for your needs.

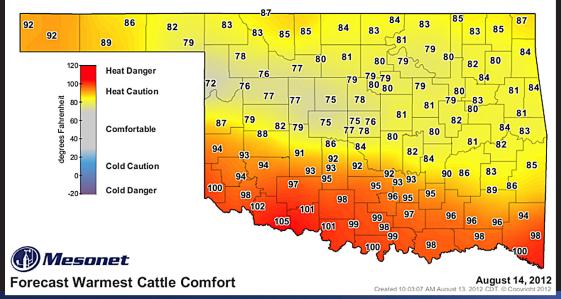
If you have comments about the page, please email us at albert@mesonet.org or sbowen@mesonet.org.

#### Guthrie Farm Monitor Current Conditions at 10:05 am CDT - August 13, 2012 **Change Mesonet Site** Share E Tweet Sunrise: 6:47 am Sunset: 8:22 pm Cattle Comfort -40 120 Wind Direction Evapotranspiration: 0.05 0.5 Ν Short Feels Like: 77°F Evapotranspiration: 0.05 0.8 48% Humidity: Tall 24-hr Rainfall: 0.00 in Burning Index 0 120 Wind Speed 10-meter: 6.9 mph Inversion 0 • +12Wind Speed 2-meter: 5.6 mph 6 Dispersion 1 3-day Avg 4" Bare Soil: 91°F 10-day Rainfall: 0.20 in 10-Inch Soil Moisture 0 1 TODAY TONIGHT TOMORROW Keetch-Byram Drought 0 800 Index Peanut Leaf Spot 0 • 60 **Mostly Sunny** Slight Chance **Chance Tstms** Tstms Pecan Scab 0 • 60 High 95°F Low 66°F High 84°F

## MESONET IN PICTURES

### Cattle Comfort Statewide Maps

• The map shows forecasted Cattle Comfort index highs for August 14. Statewide maps can be viewed by going to mesonet.org, clicking on Agriculture in the top menu, and then selecting Cattle Comfort in the left menu under Agriculture Essentials.



#### **Drift Risk Advisor** f Share 🗧 Tweet (1) Variable Upper Limit Lower Limit Ν NNE NNW 110 149 Air Temperature (F): NW 326 NE 34 304 56 WNV ENE Relative Humidity (%): 281 79 w Е 259 101° Wind Speed Average (mph): WSW ESE 24 SW 214 146° SE 1hr Rainfall (inches): 191° 169° SSW SSE s ÷ Dispersion Conditions: Show: Next 84 Hours 🗧 🗹 Show Non-Prescribed Variables Norman Get Data

### Drift Risk Advisor

 The Drift Risk Advisor allows you to input variables based on the chemical you are spraying and select wind directions you don't want, when you are spraying. It then outputs an 84-hour forecast table showing if your conditions have been met. It can be viewed by going to mesonet.org, clicking on Agriculture in the top menu, and then selecting Drift Risk Advisor in the left menu under Agriculture Essentials.

## **MESONET IN PICTURES**

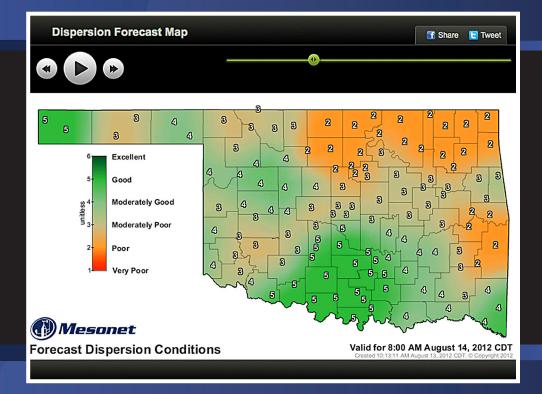
### Degree-day Heat Unit Calculator

 The Degree-day Heat Unit Calculator can be viewed by going to mesonet.org, clicking on Agriculture in the top menu, and then selecting Degree-day Heat Unit Calculator in the left menu under Agriculture Essentials.

Degree-day Heat Unit Cal	culator	😭 Share 🕒 Tweet
GUTHRIE	WHEAT	Choose Options
CHANGE SITE Click to CHANGE Click the button to change the site for which you would like to receive data.	Wheat	Start Date: 10/1/2011 End Date: 8/13/2012 Get Data
	Grass Hay	
	Alfalfa	
	Corn	
	Cotton	
	Peanut	
	Sorghum	
	Soybean	

### Forecast Dispersion Conditions

• The map shown reflects forecasted dispersion conditions for August 14. The Forecast Dispersion Conditions map is animated and allows you to view forecasted conditions for a 84hour period. The map can be viewed by going to mesonet.org, clicking on Agriculture in the top menu, and then selecting Dispersion in the left menu under Agriculture Essentials. This will take you to the current Dispersion Conditions map. Then click Dispersion Forecast Map in the left menu.







**August brought a bad combination** of heat, wind and fires. An outbreak across the state resulted in multiple wildfires during the weekend of August 3-5.

Oklahoma Mesonet's OK-FIRE program was of great importance to many officials across the state. The OK-FIRE website set records during August for unique visitors (18,113), number of visits (56,350), bandwidth (28.95 GB) and pages viewed (1,435,617). OK-FIRE usage peaked during the first weekend of August with these wildfire outbreaks.

"Of course, this comes as a result of the many tragic fires we've had this month, but it shows that OK-FIRE is being used across the state," said J.D. Carlson, Mesonet OK-FIRE Program Manager.

As firefighters across the state were battling wildfires in extreme heat, they looked to the Mesonet and OK-FIRE.

"We did use the current fire weather (conditions), site specific and forecast fire weather (conditions), and site specific charts," said Rob Hill of Stillwater Emergency Management. "We also looked at the state maps to determine wind shifts, humidities, burning indices and spread components. We used these to see if the frontal boundaries that were to move in later that evening were changing the atmosphere much. This was in an attempt to give us the upper hand on fire fighting efforts."

The Tulsa World on August 10 reported more than 111,600 acres burned across the state between Friday (August 3) and 5:30 p.m. Thursday (August 9). From the Oklahoma Department of Emergency Management, acres burned are:

Caddo County: 3,000 acres Creek County (Freedom Hills/Mannford/Olive): 58,500 acres Cushing fire (Payne County): 1,578 acres Drumright (Creek/Payne counties): 6,493 acres Glencoe fire (Payne County): 6,493 acres Luther fire (Oklahoma County): 2,621 acres Ninnekah fire (Grady County): 2,600 acres Norman/Noble/Slaughterville fire (Cleveland County): 8,928 Pittsburg County: 4,000 Shamrock fire (Creek County): 3,990 acres Yale fire (Payne County): 3,500 acres" ■

The Ninnekah fire (below), on August 3, 2012, burned 6,500 acres during that weekend. Photo provided by Paulette Nicholas. The Glencoe fire (left, bottom left) on August 4, 2012, burned 6,887 acres. Glencoe fire photos by Dave Deken, SUNUP TV Producer.





# Drought and Wildfires Plague August

By Gary McManus, Associate State Climatologist

### **AUGUST WRAP-UP**

According to data from the Oklahoma Mesonet, August finished one degree above normal to rank as the 53rd warmest on record and a half an inch below normal to come in as the 42nd driest. Those records date back to 1895. Despite those seemingly benign statistics, August actually had weather to suit just about all summer appetites. The month started with one of the hottest stretches the state has ever experienced, moved to mild and wet for a spell, then ended once again on the hot side. Unfortunately, that brief fall-like interlude in the middle of the month did little to quell the ongoing flash drought event that began in late spring. The U.S. Drought Monitor report released on August 28 showed 37 percent of Oklahoma mired in exceptional drought, with 90 percent portraved in extreme-exceptional drought. The Drought Monitor's intensity scale slides from moderate-severe-extreme-exceptional, with exceptional being the worst category. To exemplify the drought's rapid advance, only 17 percent of the state was in drought at the end of May and five percent was in exceptional drought at the beginning of August. Vegetation that had flourished in the wet and unusually warm winter and early spring became prime fuel for wildfires thanks to the heat and drought. More than 100,000 acres across the state burned in early August, with one fatality east of Norman attributed to wildfire.

The weather during early August was as intensely hot as nearly any in the state's history with temperatures ranging from 105-115 degrees across much of Oklahoma. August 1 became the state's 10th hottest day on record with a statewide average temperature of 93.7 degrees. That is still 1.2 degrees less than Oklahoma's hottest day on August 12, 1936. Oklahoma City tied its all-time record high temperature and broke its all-time record warm low temperature on the same day, August 3, with readings of 113 degrees and 84 degrees, respectively. The highest temperature recorded by the Oklahoma Mesonet during the month was 115 degrees from Kingfisher on August 1. On the cool side, several Mesonet stations reached a minimum temperature of 50 degrees on August 20.

The end of August also brings the climatological summer to a close, and it was obviously a hot and dry one. The statewide average rainfall total during summer fell 3.7 inches below normal to rank as the 14th driest on record. The summer also ranked as the 12th warmest on record at 2.5 degrees above normal. The first eight months of the year ended as Oklahoma's warmest January-August period on record at 4.3 degrees above normal. August was the 24th month out of the last 29 to finish warmer than normal, beginning with April 2010.

**90%** of Oklahoma in extreme-exceptional

drought according to the August 28 U.S. Drought Monitor

at Kingfisher on August 1 and highest temperature recorded by the Oklahoma Mesonet for August

**14th** DRIEST summer since records began in 1895

**12th** WARMEST summer since records began in 1895



## CALENDAR

### **SEPTEMBER**

- 5th-6th: OK-First Assistants Course, Red Rock
- 11th: Water, Watering and Weather, OKC Master Gardeners, OKC
- 11th: OK-First Re-certification Course, Alva
- 12th: Field Trip, Cooper Middle School, OKC
- > 13th: Weather and Mesonet, Chandler Lions' Club, Chandler
- 13th: OK-First Re-certification Course, Lawton
- 18th: OK-First Re-certification Course, Tulsa
- 20th: OK-First Re-certification Course, Durant
- 21st: STEM Safari Booth at OK State Fair
- > 25th-26th: OK-First Assistants Course, Norman

### OCTOBER

- 4th: OK-FIRE presentation, Wildland Fire Canada Conference
- 5th: Field Trip, Hillcrest Elementary, OKC
- > 9th: EPSCoR Women in Science Conf., Science Museum OK
- 17th: NWC and Mesonet Tour, Canadian County Master Gardeners, Norman
- > 29th-31st: Oklahoma Ag Expo, Oklahoma City

### Thank you for 20 years of partnership!

- Chandler Installed September 3, 1992
- Guthrie Installed September 3, 1992
- Shawnee Installed September 4, 1992

## CONTACTS

Accessing recent (within the past 7 days) Mesonet data Contact: <u>Mesonet Operator</u>

Instrumentation, telecommunications, or other technical specifications Contact: <u>Chris Fiebrich</u>

Mesonet agricultural data and products Contact: <u>Al Sutherland</u>

Mesonet meteorological data Contact: <u>OCS Data Requests</u>

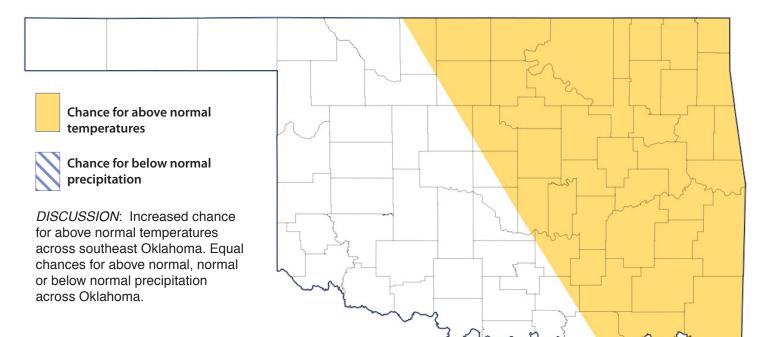
K-12 educational outreach Contact: <u>Andrea Melvin</u>

OK-First public safety outreach Contact: <u>James Hocker</u>

OK-FIRE fire decision support outreach Contact: J.D. Carlson

Not sure? Contact: 405-325-2541 or <u>Chris Fiebrich</u>.

### FORECAST FOR SEPTEMBER Click here to view the original maps from the Climate Prediction Center.





120 David L. Boren Blvd., Suite 2900 Norman, OK 73072-7305 T: 405-325-2541 F: 405-325-2550 http://www.mesonet.org



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