



Up In Flames

AN ESTIMATED 2.5 million acres are burned annually across Oklahoma, 10 percent by wildfire and 90 percent by prescribed burning. During multiple wildfire outbreaks in March, thousands of acres burned across the state. All 77 Oklahoma counties were placed in a state of emergency due to wildfires on March 11, 2011.

Wildfire season typically begins during the drydown of vegetation in the fall and lasts until the greenup period in the spring. However, wildfires can occur anytime of year in Oklahoma.

“The main factors contributing to wildfires are the amount and distribution of dead and live fuels, their moisture levels and weather factors,” said J. D. Carlson, OK-FIRE program manager.

When relative humidity drops below 35 percent and wind speed surpasses 20 mph, fire danger increases. As relative humidity drops and wind speed rises, fires become difficult to contain and can spread quickly.

On March 11, 2011, 42 fires were reported statewide and more than 30 homes were destroyed, according to the Oklahoma Department of Emergency Management.

“Relative humidity percentages in the mid-teens, combined with afternoon sustained winds of 20 to 30 mph and you had the setting for a major fire outbreak,” Carlson said.

The Mesonet’s OK-FIRE website is designed to help monitor and assess fire danger across Oklahoma. It features recent, current and forecast products for fire weather, fire danger and smoke dispersion.

“We use OK-FIRE to support fire departments in the field during an incident and help the county commissioner monitor conditions that could lead to a burn



ban,” said Lloyd Colston, Director of Altus Emergency Management.

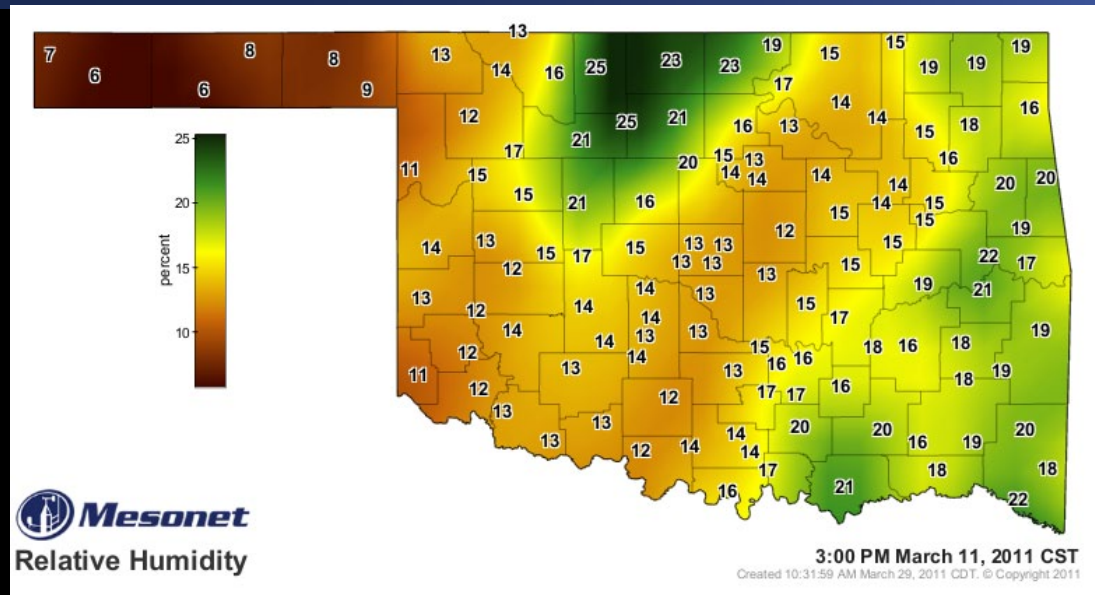
To access OK-FIRE, visit www.mesonet.org and click the OK-FIRE button on the main page. This will direct you to the OK-FIRE website.

“As grasses begin to turn green in April, fire danger will begin to subside,” Carlson said. “However, if the drought continues, we could see wildfires continue into the summer months.”

WHERE TO FIND

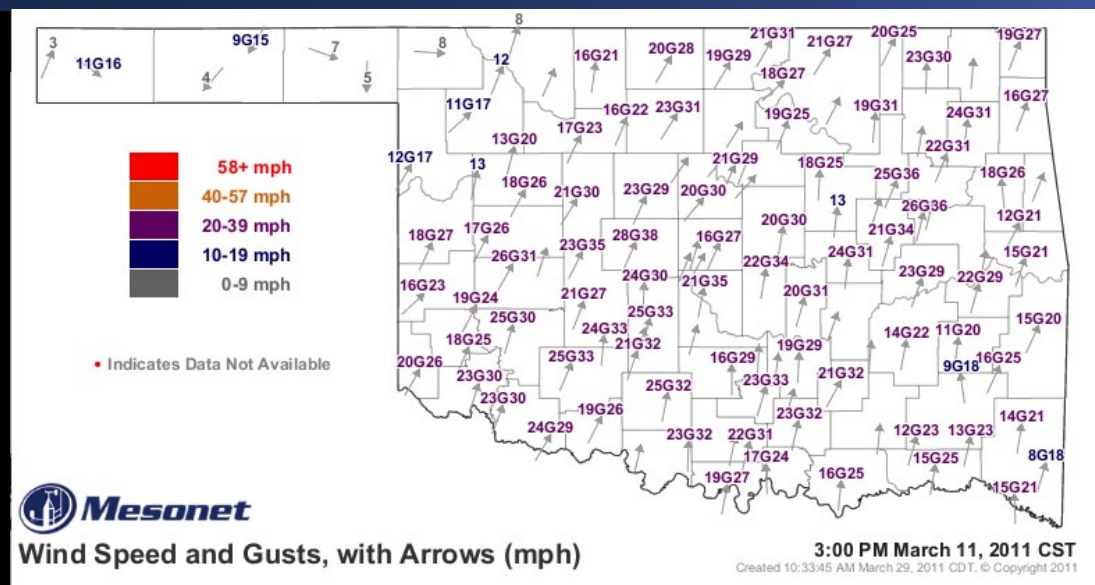
Relative Humidity

- This map displays relative humidity percentages at 3 p.m. on March 11, 2011.
- To find relative humidity maps, click the “Weather” tab. Then select the “Dewpoint and Relative Humidity” category on the left.



Wind Speed and Gusts

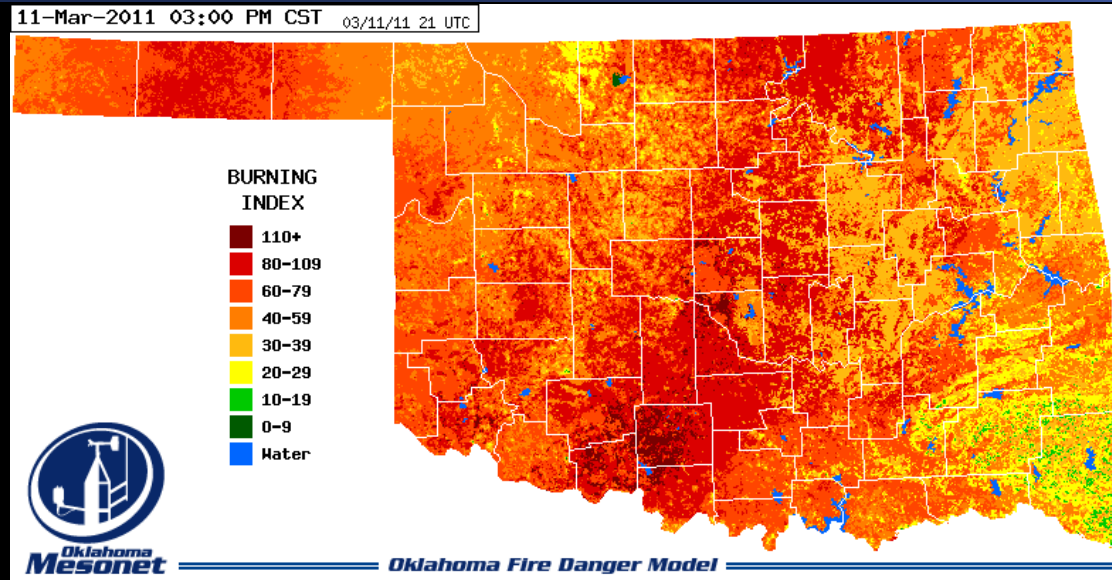
- This map displays wind speed and gusts at 3 p.m. on March 11, 2011.
- To find wind maps, click “Weather” from the top navigation bar. Then choose “Wind” from the left.
- Maps displaying arrows, wind barbs and a wind gradient are available.



WHERE TO FIND

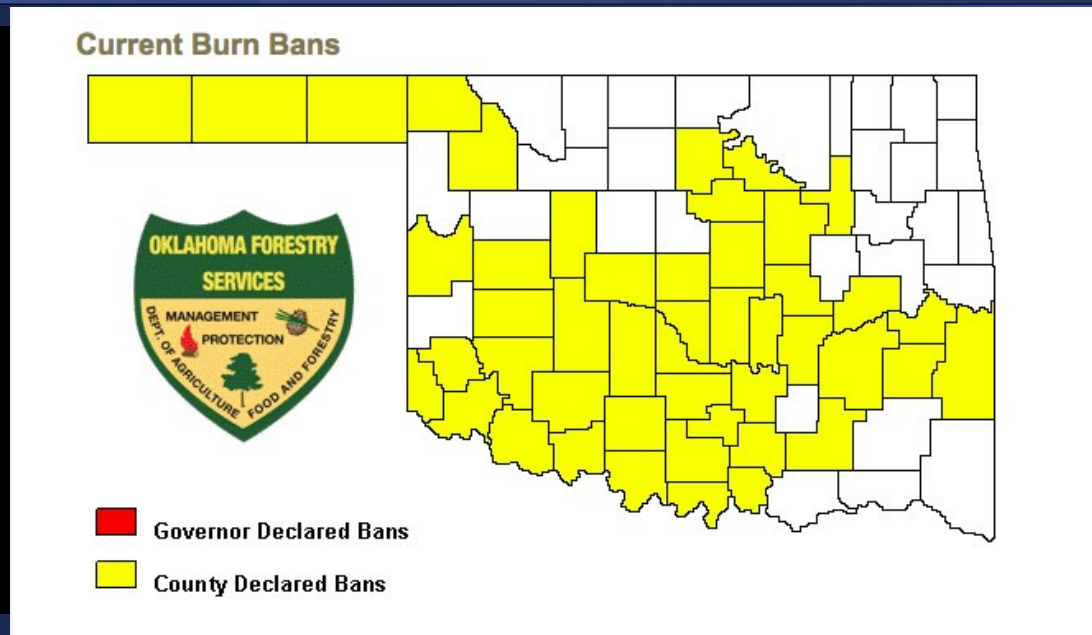
Burning Index

- This map displays the Burning Index from 3 p.m. on March 11, 2011. The higher the burning index, the more intense the fire danger.
- From the Mesonet main page, click “OK-FIRE” from the main page. This will launch the OK-FIRE website.
- Select “Fire” from the navigation bar. The current Burning Index map will be displayed.



Burn Bans

- This map displays current burn bans issued for Oklahoma.
- From the Mesonet main page, click “OK-FIRE”. This will launch the OK-FIRE website.
- Select “Fire” on the navigation bar. Then choose the “County Burn Bans” category.
- Select “Current Burn Bans”, all active county and governor declared burn bans will be displayed.





Drought Takes Center Stage

By Gary McManus, Associate State Climatologist

MARCH WRAP-UP

Warm and dry weather grabbed the headlines as the record-setting extremes of February gave way to a downright dull March. Data from the Oklahoma Mesonet ranked the month as the eighth driest and 31st warmest March since records began in 1895. Severe weather was scarce, although a few reports of large hail and high winds accompanied the few thunderstorms that did occur. Elevated fire risk was common during the month, a result of the dry and windy conditions. The Governor's office declared a state of emergency on March 11 for all 77 Oklahoma counties with the report of 30 wildfires burning simultaneously across the state.

Very little rain fell during the month, allowing severe drought conditions already in place to spread and intensify. The statewide average rainfall total was a paltry 0.7 inches, 2.41 inches below normal. It was the driest March on record for southeastern and south central Oklahoma, and the second driest in the southwest. The only significant rains fell in northeastern Oklahoma, where several Mesonet stations totaled more than 3 inches. Miami led the state with 3.36 inches. The rest of Oklahoma went largely without rain, however. Of the 120 Mesonet sites, 32 had totals of less than a tenth of an inch. Fort Cobb went without a drop of rain for the entire month. The first three months of the year were the fourth driest on record with a statewide average rainfall total of 2.3 inches, more than 4 inches below normal.

The lack of rainfall also meant plenty of sunshine and warm weather. The statewide average temperature was nearly 2 degrees above normal at 52.1 degrees. The average high temperature across the state was 64.6 degrees and the average low was 39.8 degrees. Altus and Hollis won the prize for highest temperature with their 95-degree readings on the 17th. The weather still got significantly cold at times, however, evidenced by the 15 degrees recorded at Kenton on the 14th. Waurika was the warmest location in the state with an average temperature of 57.4 degrees while Boise City brought up the rear at 45.5 degrees. March's warmth could not overcome the cool weather of January and February. The statewide average temperature for the first three months of the year was 42.3 degrees, about half of a degree below normal.

8th DRIEST

March since records began
in 1895

0.7" AVERAGE

precipitation in Oklahoma
for the month

95°F REACHED

at Altus and Hollis, the
warmest in March

2.41 INCHES

of precipitation fell at the
Miami Mesonet station, the
wettest for the month

EarthStorm

Weather and climate impact us everyday - from what to wear, how we drive, to where we choose to live. The Mesonet, "Oklahoma's Weather Network", has partnered with teachers since 1992 via the EarthStorm program to increase the use of weather and climate in classroom science curriculum. Scientists and teachers developed classroom materials using data from the Oklahoma Mesonet and the National Weather Service. We invite you to use these materials in your own classroom.

Classroom Materials
Lessons, Glossary, and Weather Events

Weather Explorations
Careers, Camps, Workshops, and More

Fri, Mar 25, 2011
EarthStorm-OK Algebra Highway

Quick Links

Benchmarks

Workshops

Weather Events

UPDATED. ENRICHED. UPGRADED.

THE NEW MESONET EarthStorm website offers K-12 teachers and students new ways to access weather data, information and education.

The changes impact more than just the EarthStorm website. Additional maps have been added to the Oklahoma Mesonet "Weather" section said Andrea Melvin, EarthStorm Program Manager. All Oklahoma and national weather data are accessed via the "Weather" section. Once you select the weather data you are interested in, thumbnails appear for selecting a particular data set. You'll find the national maps by scrolling past the Oklahoma maps. New data choices in the Weather section include "Advisories" and "Upper Air" maps.

Another new EarthStorm section is "Benchmarks." This section has individual weather maps and questions that can be quickly incorporated into science curriculum. Current Benchmarks touch on tornadoes, thunderstorms, drought and floods. "We encourage teachers to submit their own questions and graphics," Melvin said.

The upgraded EarthStorm website has maps that can be easily copied for pasting into PowerPoints or printing. To do this EarthStorm no longer uses WeatherScope to make maps and graphs. Maps can be viewed from any computer or tablet device without any additional software downloads.

"The new EarthStorm website is easy to navigate and since it is accessible beyond the classroom, parents can be involved," said Danny Mattox, Mesonet Outreach Assistant.

If you're a WeatherScope aficionado, you can still use WeatherScope. To download the latest version of WeatherScope for free or access pre-made weather maps click on "WeatherScope" at the bottom of the "Weather" menu.

To get to teacher and student resources, use the new top Mesonet navigation bar and select "K-12 Education." The "EarthStorm" link on the front page of the Mesonet.org website will open up the same webpage. Some new opportunities you'll want to check out are in "Field Trip", "Job Shadow" and "Summer Camp" sections.

Consider joining us this summer for the EarthStorm Teacher Institute or the Mesonet Summer Camp. The summer camp is a week-long residential camp designed to introduce middle school students to the science of meteorology, weather forecasting and career opportunities. The application deadline has been extended to April 20. There is detailed information and application forms for both summer activities online. Check out the Mesonet and the new EarthStorm websites and let us know what you think.

CALENDAR

APRIL

- ▶ 1st: EarthStorm Teacher Institute Application Available
- ▶ 1st: Mesonet Spring Site Pass starts
- ▶ 4th-7th: OK-First Full Certification Course, Norman, Okla.
- ▶ 8th: OK-FIRE Training, Norman, Okla.
- ▶ 12th: OK-First Recertification Training, Ponca City, Okla.
- ▶ 19th: OK-First Recertification Training, Oklahoma City, Okla.
- ▶ 20th: Mesonet Summer Camp application deadline
- ▶ 21st: ScienceFest, Oklahoma City, Okla.

MAY

- ▶ 3rd-4th: State FFA Convention, Oklahoma City, Okla.

JUNE

- ▶ 3rd: Master Gardener's State Conference, Enid, Okla.
- ▶ 5th-10th: Mesonet Summer Camp, Norman, Okla.

CONTACTS

Accessing recent (within the past 7 days)
Mesonet data

Contact: [Mesonet Operator](#)

Instrumentation, telecommunications, or
other technical specifications

Contact: [Chris Fiebrich](#)

Mesonet agricultural data and products

Contact: [Al Sutherland](#)

Mesonet meteorological data

Contact: [OCS Data Requests](#)

K-12 educational outreach

Contact: [Andrea Melvin](#)

OK-First

Contact: [OK-First Staff](#)

OK-FIRE

Contact: [J.D. Carlson](#)

Not sure?

Contact: 405-325-2541 or [Chris Fiebrich](#).

FORECAST FOR APRIL

[Click here to view the original maps from the Climate Prediction Center.](#)

