

Agweather Connection

<http://agweather.mesonet.org/>

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OKLAHOMA'S WRATH

By Laura K. McKay

If you have been in Oklahoma very long, you know that the weather can change on a dime. And, sometimes, Oklahoma weather is anything but pleasant. If you're an agricultural producer, you have even more to worry about because your livelihood is susceptible to whatever weather comes your way.

Unfortunately, severe weather plagues Oklahoma throughout the spring and summer when many crops are reaching maturity. Excess moisture, hail and wind are some causes of crop failure in Oklahoma. Other damaging weather includes drought, heat, cold, frost and freeze.

Many farmers and ranchers opt to buy insurance to protect their assets from the uncertainty of Oklahoma's weather.

According to Dr. Barry Dodson, acting director of the Oklahoma City Regional Risk Management Office, there were 17,954 crop insurance policies and 95 livestock insurance policies in 2006.

Of the more than 18,000 policies, 12,366 were claimed and agricultural producers received millions of dollars in insurance money for crop losses last year.

"There was approximately \$133 million in insured crop losses in Oklahoma during 2006, due in the most part from weather related incidences," said Dodson.

Considering that only about 13 percent of Oklahoma farmland is insured, that \$133 million represents a small percentage of the actual damage that weather has caused Oklahoma crops in 2006. And, it's not just crops that sustain damage. Livestock are killed by lightning and fire, round bales are burned as wildfires race across the prairie, farm ponds dry up because of drought, tornadoes tear at barns and toss around farm equipment, and high winds rip roofs off of outbuildings.

Although many producers are looking forward to the possibility of rain this spring, they are hoping the showers will not be part of damaging storms or tornadoes. ■

Thunderstorm watch

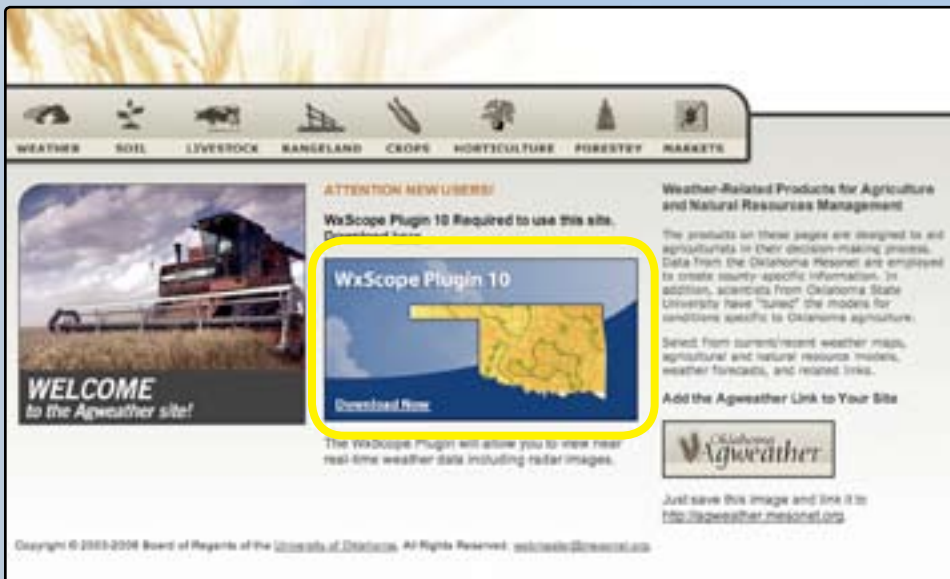
By Laura K. McKay

Severe weather can be exciting and scary. Keeping ahead of Oklahoma's ever-changing weather can save you and your family from tragedy. By constantly monitoring the weather, you can know what weather is headed your way and what you need to do to stay safe.

Oklahoma farmers, residents and weather enthusiasts can utilize several weather tools on the free Agweather Web site at

<http://agweather.mesonet.org/>. The Agweather Web site features data from the Oklahoma Mesonet, a statewide weather network supported by OSU and OU.

To help you get started, step-by-step directions are listed below. If you have any questions or need more information, call (405) 325-3126 or send e-mail to laura.k.mckay@okstate.edu or albert.sutherland@okstate.edu.



Free download

Start at <http://agweather.mesonet.org/>. Be sure to download the WxScope Plugin. It's safe and free, and allows you to view all of the resources that Agweather offers.

If your Internet connection is slow, we can send you a free CD that will allow you to download the WxScope Plugin more quickly. Call (405) 325-3126 to request a CD.

[Click here for the Windows software.](#)

[Click here for the Macintosh software.](#)



Radar

From the Agweather home page at <http://agweather.mesonet.org/>, pick the "Weather" button. Then select "Radar and Satellite." Choose a specific radar from the map or the drop-down menu.

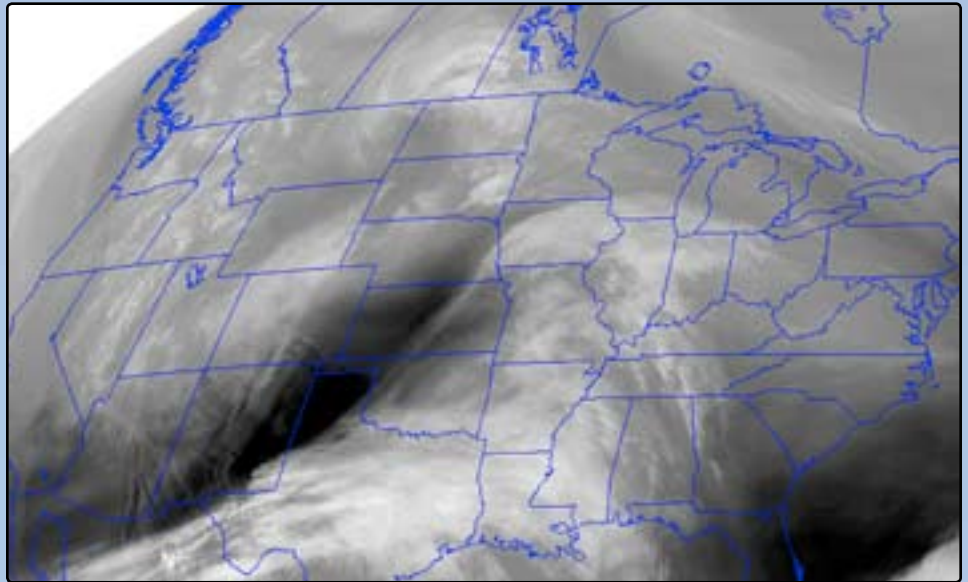
To see the direction a storm is moving, click on "Show Animated Radar Map."

To learn more about the two modes in which the radar operates, [click here](#).

Satellite

From the Agweather home page at <http://agweather.mesonet.org/>, pick the “Weather” button. Then select “Radar and Satellite.” You have three choices listed at the bottom of the left-hand menu; “Visible,” “Water Vapor” and “Infrared.”

The image to the right is the water vapor mode and shows “invisible” water in the air. This image shows a distinct dryline across the panhandles of Oklahoma and Texas. A dryline is a boundary separating warm, **dry** air from warm, **moist** air



Forecast

From the home page located at <http://agweather.mesonet.org/>, select the “Weather” icon. Then choose “Forecasts,” then “National Weather Service.” Choose the forecast office closest to your location. You will be transferred to the National Weather Service Forecast page.

Toward the top of the Web site, you will see a big “Enhanced Web Page” button or an “UPDATE” button. Click on this button to see the latest weather bulletin. This information is updated frequently during severe weather.

...SEVERE STORMS EXPECTED LATE TODAY...

Short Term Forecast Short Term Forecast

AREAS BEING MONITORED FOR STORM DEVELOPMENT

 A weather forecast map from the Norman Forecast Office. The main map shows two areas being monitored for storm development: AREA 1 (west of the Oklahoma panhandle) and AREA 2 (east of the Oklahoma panhandle). AREA 1 is associated with a 'Dryline' and 'increasing instability'. AREA 2 is associated with 'Thin clouds; increased low-level warming' and 'Aridity Gap is weaker in the west; Gap is stronger in the east'. Other features include 'Moisture transport to the south' and 'Instability to the south'. A legend at the bottom left indicates the map was generated on Wed Nov 28 12:40PM CDT. To the right, there are smaller panels for 'Regional Weather' and 'Hazardous Weather Outlook'.

County Climate Info

From the Agweather home page at <http://agweather.mesonet.org/>, pick the “Weather” button. Then select “Monthly and Climate,” then “Oklahoma Climate Data” and finally choose “County Climate Summaries.” Then pick “County Climatologies Page” located in the center of the Web site. Select a county and finally click “Quick Climate Facts.”

This page tells, on average, how many storms your county experiences. This information might help when choosing crop insurance.

OKLAHOMA CLIMATOLOGICAL SURVEY

PRECIPITATION

Average Annual: 34.94 inches
 Days With Precipitation: 71
 Wettest Year: 53.24 inches in 1987
 Driest Year: 16.34 inches in 1901
 Greatest Daily Rainfall: 7.30 inches (Chickasha, October 26, 1983)

OTHER FACTS

Average Wind Speed: 8 mph
 Sunshine: 55- 50%
 Average Humidity: 69%
 Thunderstorm Days: 47
 Hail Events: 4 per year
 Tornadoes (1950-2003): 60

 Two maps of Oklahoma. The top map shows 'Average Annual Temperature 1971-2000' with a color scale from green (cooler) to red (warmer). The bottom map shows 'Average Annual Precipitation 1971-2000' with a color scale from light green (less precipitation) to dark green (more precipitation).



Lightning can be a very destructive force but steps can be taken to protect livestock, property and human lives. By installing effective lightning protection systems to vulnerable buildings, agricultural producers are protecting themselves from lightning damage. A small investment now can protect farms from future lightning devastation.

Directing light

*Excerpt taken from [Lightning Protection for Farms](#)
Published by Cornell Cooperative Extension
Written by Diane Chamberlain and Eric Hallman*

Lightning, one of nature's most powerful forces, can cause a great deal of damage, particularly in a farm environment. A lightning strike can start fires in buildings, damage electrical equipment, and electrocute humans and livestock. Losses from lightning can be very costly. Fortunately, most losses caused by lightning strikes can be prevented.

Lone trees and isolated buildings, which are closer to the clouds than their surroundings, are frequently the objects of lightning strikes. That is why it is particularly important to take precautionary measures to protect farm buildings from the damage lightning strikes can cause.

Lightning can enter a building in one of four ways. It can strike a metal object on the roof. It can strike a

building directly. It can strike a tree or silo near the building and jump to the building, which occurs when the building provides an easier path to a ground. Or, it can strike a power line or a wire fence and follow the line or fence to the building.

A properly designed lightning protection system safeguards vulnerable structures by providing an easy path to a ground, which harmlessly dispels the electrical charges. It is also possible to extend protection to trees that are situated near farm structures or that offer cover to livestock. By installing effective lightning protection, agricultural producers are protecting themselves from lightning damage.

To read more about lightning protection for farms, [click here](#). ■

Agweather
LOCAL. RELIABLE. FREE.

Agweather is a product of the Oklahoma Mesonet.
<http://agweather.mesonet.org/>

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