

www.mesonet.ora

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connection



After a Grinch of a drought the past several years in Oklahoma, there are indicators that some 'giveth' is helping to provide relief for what has been 'taketh away.'

According to Francie Tolle, Executive Director, of the USDA Oklahoma State Farm Service Agency, there are numerous disaster programs, some of which were set forth by the 2008 Farm Bill, to help provide relief for this past year's drought. This cornucopia includes the Livestock Forage Program, Supplemental Revenue Assistance Program, Non-insured Disaster Program, Emergency Conservation Program, and Conservation Reserve Program. Over the past year, these programs have collectively returned over \$220 million dollars to Oklahoma farmers.

"Information from the Mesonet has been instrumental in providing factual data on the conditions our state may be facing," Tolle said.

-by Kevin Kloesel In the same spirit as a letter to the North Pole, the \$220 million returned to Oklahomans also started with a list. However, asking for \$220 million to be placed under the tree requires significant and scientifically sound justification! In Oklahoma, it is the Mesonet that provides this valuable service. The scientists at the Oklahoma Climate Survey check Mesonet data, and sometimes twice, to assess the naughty and nice of our weather and climate conditions. In this way, the Mesonet allows Oklahomans to maximize the

"Counties are reliant on the information that is offered by the Mesonet to justify their loss submissions," Tolle said. "While there is no way to specify the total financial benefit, it is safe to say that many producers were able to feed livestock that would have otherwise had to be sold."

And that's A Christmas Story we can all be proud of!

jingle from these important disaster relief programs.



MESONET IN PICTURES

Topographic Map

 A more detailed description of each Mesonet site is provided on the Mesonet website. Go to the "Station Names Map", then click on the site to get more information. Information provided includes where the location is, weather variables being measured, a panorama of the site, a topographic map, and aerial photos at the site.

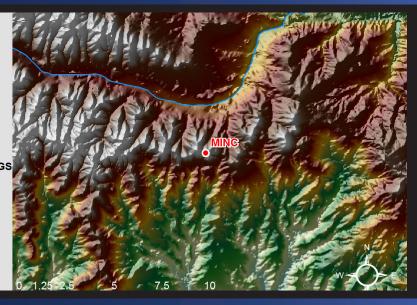
Minco (MINC) Oklahoma Mesonet Station

Oklahoma Mesonet Stations
 Oklahoma County Lines
 Oklahoma Hydrology
National Elevation Dataset - USG\$

High : 463.718 meters

Value

Low : 339.283 meters



Seasonal Photos

 Seasonal photos are taken at each Mesonet site. To the right is a photo showing the extent of vegetation cut at the Minco station taken summer 2012. Pictured is the rain gauge surrounded by a wind screen to help reduce under catch. To view this and other photos, go to www.mesonet. org, click on "About" and then "Station Names Map" on the left. Click on a station, and on the right, click on "View seasonal photos of this site".



MESONET IN PICTURES

Before

 Seasonal photos are taken at each Mesonet site before and after our landscape technician works on the area. To the right is a before photo of the Apache site taken summer 2012. To view this and other photos, go to www.mesonet. org, click on "About" and then "Station Names Map" on the left. Click on a station, and on the right, click on "View seasonal photos of this site".



After

 To the right is an after photo of the Apache site taken summer 2012. To view this and other photos, go to www.mesonet. org, click on "About" and then "Station Names Map" on the left. Click on a station, and on the right, click on "View seasonal photos of this site".



Creating a Natural Environment at the Mesonet Sites

-by Stephanie Bowen

Having native vegetation at a Mesonet site is very important. We want our Mesonet data readings to be representative of the area or town where they are being collected. Mark McMinn is the Mesonet's Landscape Technician, and it is his job to make sure all is in order.

"When I get to a Mesonet site, the first thing I look at as I am driving up is the site's vegetation and the bad weeds," McMinn said. "I try to control that because we want all natural vegetation at the site, like what the field around it looks like."

By the end of the year, McMinn will have visited all 120 Mesonet sites twice since he started working here in June. He always takes photos of the site before and after his work, which includes mowing, raking and spraying the area.

McMinn is focusing on Johnson grass and grasses that get tall or out of control. Problems with sandburs have also been an issue, he said, and he is working to get that under control so he can focus on other things.

"When I first got here, I would go out to the site, and weeds would be taking over native vegetation," McMinn said. "I mow everything down and spray a broadleaf spray because I don't want to kill the natural grasses. If I go in there and cut everything down, the area won't be natural then."

After McMinn is finished at a site, the field technicians can come in and go straight to work maintaining the site tower and instruments without having to handle the weeds or other landscape issues. McMinn says he enjoys his job and the opportunity to meet the landowners.

"The landowners are always nice," McMinn said. "They really appreciate the Mesonet and what we do." ■

Mark McMinn, Landscape Technician for the Mesonet, mows, rakes and sprays a broadleaf spray to make the vegetation within the site similar to the natural vegetation surrounding the site. Afterward, our field technicians, like Phil Browder (right), come in to perform maintenance on the site tower and instruments.





NOVEMBER WRAP-UP

Drought surged during November with a return to the dry, warm and windy weather pattern that Oklahoma has become accustomed to over the last couple of years. According to the latest U.S. Drought Monitor report, the amount of extreme to exceptional drought rose from 72 percent last week to 91 percent this week. The state had not seen that amount of extreme to exceptional drought since late September. Other than a small but persistent area of moderate drought in far northeastern Oklahoma, the entire state remained in at least severe drought according to the report. The bulk of that increase came across areas in southern and eastern Oklahoma that had been categorized in severe drought since September.

Through November 28, the statewide average temperature stood at 52.4 degrees according to preliminary data from the Oklahoma Mesonet, approximately 3.4 degrees above normal. That would rank this November as the 12th warmest since 1895, although a couple of warm days to finish the month could increase that ranking. November is set to become the 26th month out of the last 32 to finish warmer than normal, dating back to April 2010. Oklahoma's 2012 January-November average temperature remains approximately two-tenths of a degree ahead of 1954 in a race to break the record for warmest calendar year.

The month has also been exceedingly dry, a continuation of what the state has seen since May. The Mesonet's statewide average total for the month will finish at 0.57 inches, more than 2 inches below normal and the 21st driest November on record. It has been 63 days since the Mesonet site at Buffalo has seen a day with at least a quarter-inch of rain. Other parts of western and southern Oklahoma have gone from 40-60 days with a similar lack of rainfall. It has been 60 days since the Hollis Mesonet site has recorded a tenth of an inch of daily rainfall and as many as 47 days in the Panhandle. This November stands in stark contrast to last year's version, which ended as the 12th wettest on record at nearly 2 inches above normal. The current span of particularly dry weather extends farther back than the beginning of November. According to preliminary data from the Oklahoma Mesonet and the National Climatic Data Center, the statewide average rainfall total for May through November was 13.48 inches, the second driest such period on record in Oklahoma. The only drier May through November was 1952's 13.34 inches.

The combination of wind, warmth and lack of rainfall accelerated the loss of moisture from the state's soils and reservoirs, and impeded the progress of the winter wheat crop. The November 26 weekly crop update from the USDA's Oklahoma office of the National Agricultural Statistics Service noted that the state's topsoil and subsoil moisture conditions were rated 95 percent and 97 percent poor to very poor, respectively. The report also indicated that only 13 percent of the winter wheat crop was rated as good, with one percent in the excellent category. Eleven of the state's major reservoirs are at less than 70 percent of normal capacity, with an additional eight being below 80 percent. Lake Altus-Lugert is in the worst shape at 17 percent of capacity.

Oklahoma Drought Picture Worsens During November

By Gary McManus, Associate State Climatologist

52.4°F average statewide temperature for November

> **0.57**" **RAINFALL** statewide average for November

> > 2nd driest May-November on record

DAYS since the Hollis Mesonet site has recorded a tenth of an inch of daily rainfall



CALENDAR

DECEMBER

- 11th/12th: OK-FIRE evening/full-day workshops, Ardmore
- > 14th: OK-FIRE full-day workshop, Antlers
- > 17th/18th: OK-FIRE evening/full-day workshops, Stillwater

JANUARY

- > 11th-12th: KNID Agrifest, Enid
- > 17th: Meteorology Class, Norman 6th Grade GATE
- 18th: Field Trip, Cooper Middle School
- 21st-23rd: Oklahoma Agricultural Aviation Association Convention, OKC
- 22nd: Meteorology Class, Norman 6th Grade GATE

Thank you for 20 years of partnership!

- Cherokee Installed December 1, 1992
- Medford Installed December 1, 1992
- Blackwell Installed December 2, 1992
- Newkirk Installed December 2, 1992
- Red Rock Installed December 3, 2012
- Idabel Installed December 4, 1992
- Ada Installed December 11, 1992
- Sulphur Installed December 11, 1992
- Hinton Installed December 22, 1992
- Watonga Installed December 22, 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>

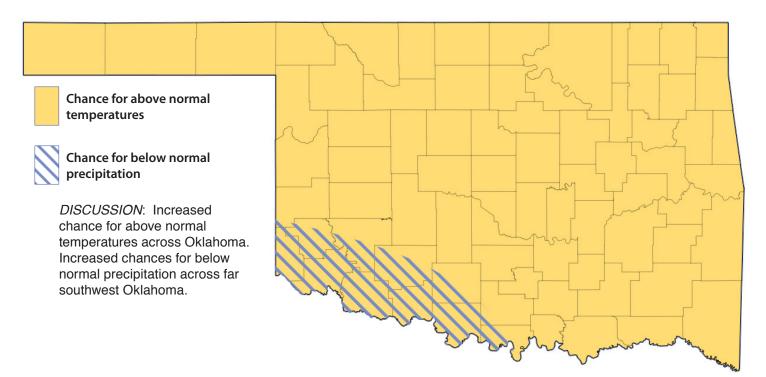
K-12 educational outreach Contact: <u>Andrea Melvin</u>

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 DECEMBER <u>Click here to view the original maps from the Climate Prediction Center.</u>





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