

# agweather connection

## Frozen Assets, Dried Out Dreams

Much of Oklahoma's wheat crop was damaged after being plagued by a warm, dry spell throughout the fall and winter, followed by freezing temperatures this spring. The drought that occurred after planting left wheat more vulnerable to a freezing event.

"The crop was two to three weeks ahead of schedule in the southwest and around the Kingfisher and El Reno areas, and somewhat earlier in places to the north," said Tim Bartram, Executive Director of the Oklahoma Wheat Growers Association. "Also, I believe that overall the crop was stressed and made it more susceptible to a freeze."

In September and October 2008, Oklahoma was experiencing minimal dryness. That changed rapidly and by November 2008, at least half of the state was abnormally dry, if not moderately droughty. Drought levels continued to climb throughout the winter and in January 2009, about 95 percent of Oklahoma was at least abnormally dry, if not moderately or severely droughty.

Because of the warm, dry conditions, Oklahoma wheat matured more quickly than usual.

"Most years, Oklahoma wheat is not far enough along by the end of March for these temperatures to be of great concern. However, the warm temperatures during February and the extreme drought stress have sped our wheat crop along in 2009," said Dr. Jeff Edwards, Small Grains Extension Specialist at Oklahoma State University. "As a result, much of the crop in southwest Oklahoma was starting to head when the freeze occurred."

According to Edwards, the cold snap resulted in various levels of injury from cosmetic damage to total sterility. "Once

you move out of the northern tier of counties, the freeze injury increases dramatically. By and large, wheat south of Highway 51 all the way to the Red River was devastated by the freeze," said Edwards.

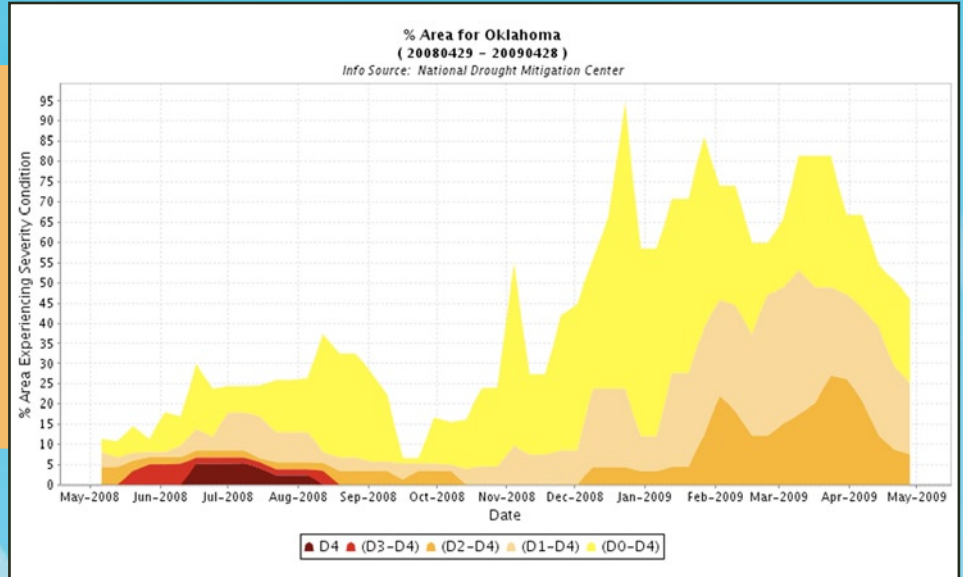
Wheat growers have several options in recovering some of their loss. "Producers can harvest and see what they get. The concern for seed may lead to some of this. Producers can also cut for hay, but some in the southwest won't make enough to justify it," said Bartram. "They can destroy the wheat and go to a summer crop. They can turn cattle on the wheat and let them graze what they will. Or, they can punt and try again next year. Insurance may lead to a lot of this option."

Regardless of how Oklahoma producers choose to deal with the damaged wheat, there is no doubt that the wheat crop will be dramatically impacted.



## Area Drought Information

- Start at <http://www.drought.gov/>
- In the top left corner, under Area Drought Information, select Oklahoma and click "Go"
- Once the new page loads, go to the bottom right corner and click on the "Drought Time Series"
- This graphic show the percent of Oklahoma experiencing a specific drought level



## Rainfall and Drought Update

- Go to <http://aqweather.mesonet.org>
- Click "Weather"
- Next, click "PAST WEATHER DATA"
- Then select "Monthly Weather Summary"
- Finally, choose the time frame and Mesonet station you are interested in, and click "Get Summary"

MESONET CLIMATOLOGICAL DATA SUMMARY													April 2009		Time Zone: Midnight-Midnight CST							
(HOOK) Hooker													Nearest City: 1.0 W Hooker		County: Texas							
Latitude: 36-51-18													Longitude: 101-13-31		Elevation: 2992 feet							
DAY	TEMPERATURE (°F)				DEG DAYS		HUMIDITY (%)			RAIN (in)		PRESSURE (in)		WIND SPEED (mph)		SOLAR (MJ/m <sup>2</sup> )		4" SOIL TEMPERATURES				
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	MAX	MIN	STN	MSL	DIR	AVG	MAX	SOD	BARE	MAX	MIN		
1	66	30	47.1	29.6	17	0	90	17	55	0.00	26.42	29.49	NNW	8.9	38.4	16.52	40.4	NA	NA	NA		
2	54	32	41.1	28.3	22	0	98	26	65	0.01	26.68	29.77	N	16.8	48.4	25.26	40.4	NA	NA	NA		
3	75	32	52.1	30.6	11	0	85	18	49	0.00	26.48	29.55	SSE	19.0	41.6	25.17	41.5	NA	NA	NA		
4	63	31	51.1	26.8	18	0	64	15	41	0.00	26.47	29.54	NNW	28.1	58.6	24.31	44.3	NA	NA	NA		
5	45	28	34.4	18.1	29	0	73	31	53	0.00	27.11	30.24	NNW	28.3	50.6	25.39	42.9	NA	NA	NA		
6	51	20	35.5	16.2	30	0	91	20	52	0.00	27.25	30.39	NNW	14.5	38.5	26.25	42.2	NA	NA	NA		
7	77	21	48.5	17.3	16	0	83	8	40	0.00	26.94	30.05	W	7.6	25.7	26.76	42.6	NA	NA	NA		
8	79	34	56.3	24.7	9	0	65	11	35	0.00	26.69	29.77	SE	12.6	35.1	24.11	44.6	NA	NA	NA		
9	64	34	49.5	29.6	16	0	80	18	50	0.00	26.48	29.54	N	20.6	56.2	22.13	45.9	NA	NA	NA		
10	60	34	44.6	29.4	18	0	85	31	58	0.00	26.97	30.08	N	11.0	29.4	25.93	45.9	NA	NA	NA		
11	54	31	41.4	35.9	23	0	97	51	82	0.64	26.95	30.06	SE	11.1	30.7	7.03	45.0	NA	NA	NA		
12	48	39	43.0	41.6	22	0	98	85	95	0.47	26.75	29.84	N	10.5	26.3	3.48	45.0	NA	NA	NA		
13	64	39	48.8	40.1	14	0	93	39	75	0.00	26.85	29.96	NNW	11.6	28.3	22.86	45.8	NA	NA	NA		
14	76	39	58.4	40.4	7	0	93	26	56	0.00	26.77	29.86	S	15.2	32.2	26.18	47.1	NA	NA	NA		
15	73*	52*	60.1*	43.1*	2*	0*	68*	36*	54*	0.00*	26.73*	29.82*	SSE*	19.1*	40.5*	16.98*	49.9*	NA	NA	NA		
16	56	50	53.0	48.9	12	0	97	67	86	0.98	26.82	29.92	SSE	17.5	32.4	4.21	50.4	51.7	54	49		
17	66	42	53.2	44.7*	11	0	98*	38*	76*	0.95	26.84	29.94	SE	12.6	32.0	18.83	52.0	55.3	64	50		
18	58	35	45.8	40.9	19	0	97	54	84	0.09	26.86	29.97	NNW	9.9	32.1	14.38	51.7	52.0	58	48		
19	65	42	52.0	38.7	12	0	90	29	65	0.00	27.08	30.20	NNW	17.4	40.5	28.02	51.1	52.0	59	47		
20	73	40	56.3	38.7	8	0	89	23	58	0.00	27.01	30.13	W	8.9	22.1	27.28	52.1	54.4	61	49		
21	79	44	61.9	41.7	3	0	87	20	54	0.00	26.94	30.05	NW	7.1	27.2	28.95	54.1	57.1	64	52		
22	84	49	65.9	43.8	0	1	87	18	51	0.00	26.78	29.87	SE	5.9	19.9	29.06	55.9	59.2	66	54		
23	85	45	64.6	48.5	0	0	92	25	61	0.00	26.70	29.79	SE	5.5	16.2	26.88	57.4	60.9	67	56		
24	89	50	68.5	39.2	0	4	82	10	41	0.00	26.63	29.71	SW	13.3	36.1	27.65	58.3	60.4	64	56		
25	66	43	55.0	40.7	11	0	87	32	61	0.00	26.74	29.83	ENE	13.6	29.8	23.52	57.7	59.4	65	55		
26	62	43	59.7	40.9	2	0	97	11	63	0.00	26.62	29.70	WSW	11.7	41.1	25.73	57.5	59.3	64	55		
27	63	44	51.7	41.0	11	0	92	48	68	0.00	26.96	30.07	N	14.9	47.9	20.43	57.0	58.0	61	55		
28	59	42	49.1	45.5	15	0	96	77	88	0.00	27.06	30.18	SSE	12.5	24.9	7.68	55.4	55.2	58	54		
29	83	57	67.5	57.1	0	5	94	34	73	0.00	26.80	29.89	S	14.8	33.4	23.24	57.3	59.5	65	56		
30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
68* 39* 52.3* 36.6*													-< Monthly Averages ->		26.81* 29.90*		NNW* 13.8* 58.6*		21.52*		49.4* 56.7* 62* 53*	
Temperature - Highest: 89*													Degree Days - Total HDD: 356*		Number of Days With:		Tmax ≥ 90: 0*		Rainfall ≥ 0.01 inch: 6*			
Lowest: 20*													Total CDD: 11*		Tmax ≤ 32: 0*		Rainfall ≥ 0.10 inch: 4*					
Rainfall: Monthly Total: 3.14* in.													Humidity - Highest: 98*		Tmin ≤ 32: 0*		Avg Wind Speed ≥ 10 mph: 22*					
Greatest 24 Hr: 0.98* in.													Lowest: 8*		Tmin = 0: 0*		Max Wind Speed ≥ 30 mph: 19*					

## The Ticker

- Start at <http://aqweather.mesonet.org>
- Click "Learn More" from the horizontal menu in the middle of the screen
- Next, click "Links"
- Then choose "Oklahoma Mesonet"
- At the very top, right of the screen, click "Ticker"
- On this page, you can read through the current Ticker, search past Tickers, or sign up to receive the Ticker e-mail

### Oklahoma Climatological Survey

# THE TICKER

The Oklahoma Mesonet Network

"Known for our strong convections."

[... sign up for the Ticker!](#)      [... about the Ticker](#)

**... Day by Day ...**      **... April 30 in Mesonet History ...**

Find a particular day's Ticker.

If you're a bit off, don't worry, because just like horseshoes, "almost" counts on the Ticker home page!

Record Maximum 96 F BUFF 2008  
Record Minimum 27 F CAMA 1996  
Record Rainfall 4.77" FTCTB 2000

April | 16 | 2009 | Get Ticker      \* Mesonet History = since 1994

**... Search the Ticker Archives ...**

Search for word(s):  Search!

Search for articles containing (  all |  any ) of these words

Case-Sensitive Search



### Oklahoma Climatological Survey: Drought Monitoring Tools

HOME

SPRING TO DATE    WARM GROWING SEASON    YEAR TO DATE    WATER YEAR TO DATE

LAST 30 DAYS    LAST 60 DAYS    LAST 90 DAYS    LAST 120 DAYS    LAST 180 DAYS    LAST 365 DAYS

Water Year: Oct 1, 2008 through Apr 29, 2009

Climate Division	Total Rainfall	Departure from Normal	Pct of Normal	Driest since	Wettest since	Rank since 1921 (88 periods)
Panhandle	8.28"	+0.45"	106%	2007-08 (6.23")	2006-07 (13.12")	27th wettest
N. Central	13.19"	-0.54"	96%	2005-06 (8.97")	2007-08 (14.53")	40th wettest
Northeast	17.18"	-3.44"	83%	2005-06 (12.43")	2007-08 (27.36")	42nd driest
W. Central	10.27"	-2.09"	83%	2005-06 (6.80")	2007-08 (11.03")	40th driest
Central	13.74"	-4.62"	75%	2005-06 (8.53")	2007-08 (18.90")	34th driest
E. Central	15.41"	-8.98"	63%	2005-06 (13.00")	2007-08 (27.71")	12th driest
Southwest	11.32"	-2.00"	85%	2005-06 (6.62")	2007-08 (11.91")	41st driest
S. Central	14.31"	-6.87"	68%	2005-06 (14.28")	2007-08 (18.63")	15th driest
Southeast	20.25"	-8.62"	70%	2005-06 (18.96")	2007-08 (35.16")	16th driest
Statewide	13.77"	-4.02"	77%	2005-06 (10.39")	2007-08 (18.96")	29th driest

**Fire Danger Model Burning Index**  
updated every hour

[click to enlarge](#)

**Keetch-Byram Drought Index**  
updated every hour

[click to enlarge](#)

**Fractional Water**  
updated daily

Climate    Driest    Wettest    Apr 29    Most Like (Arndt)

## Oklahoma Rainfall & Drought Info

- Start at <http://agweather.mesonet.org>
- Click "Soil/Water"
- Next, click "DROUGHT"
- Then choose "Oklahoma Rainfall and Drought Update"
- Next, select "WATER YEAR TO DATE" from the horizontal menu

## Archived Extension Newsletters 2009

### April 16, 2009 - Volume 2, Issue 09

**Topics:** Freeze injury to wheat, Summer crop alternatives, Fertility after lost wheat crop, Wheat disease update, Canola harvest considerations, Educational opportunities in Plant and Soil Sciences, Upcoming events

### April 3, 2009 - Volume 2, Issue 08

**Topics:** Freeze injury to wheat, Kansas freeze update, Assessing soil compaction, Starter fertilizer for summer crops, Russian wheat aphid, Upcoming events

### March 16, 2009 - Volume 2, Issue 07

**Topics:** Understanding Seed Germination Testing, First Hollow Stem Update, Brown Wheat Mite Showing Up in Winter Wheat, Grain Amaranth a Possible Addition to Oklahoma's Alternative Crops List, Setting a Realistic Yield Goal, Upcoming events

### March 8, 2009 - Volume 2, Issue 06

**Topics:** FHS Update, FHS from the animal science perspective, Upcoming events

### February 27, 2009 - Volume 2, Issue 05

**Topics:** FHS is here, Wheat disease update, Soil microbiology and biofuels, Upcoming events

### February 20, 2009 - Volume 2, Issue 04

**Topics:** Gophers in Alfalfa, First Hollow Stem Rapidly Approaching, Decision Time for Spring Planted Crops, Pete Sheets, Upcoming events, Roundup Ready Alfalfa

## Plant & Soil Extension News

- Go to <http://pss.okstate.edu/>
- Click "Extension" from the left vertical menu
- Then select a current newsletter or view the newsletter archives

### Daily Data, Time Series

[overview](#)    [details](#)    [formats](#)    [related data](#)

#### Step 1: Select Beginning and Ending Dates

	Month	Day	Year
Beginning Date	April	6	2009
Ending Date	April	7	2009

#### Step 2: Select Stations

- ACME - Acme
- ADAX - Ada
- ALTU - Altus
- ALVA - Alva\*
- ALV2 - Alva
- ANTL - Antlers
- APAC - Apache
- ARDM - Ardmore\*

\* Retired Station

#### Step 3: Select Variables

- TMAX, Maximum Air Temperature [F]
- TMIN, Minimum Air Temperature [F]
- TAVG, Average Air Temperature [F]
- DMAX, Maximum Dew Point Temperature [F]
- DMIN, Minimum Dew Point Temperature [F]
- DAVG, Average Dew Point Temperature [F]
- HMAX, Maximum Relative Humidity [pct]
- HMIN, Minimum Relative Humidity [pct]

#### Step 4: Get Data

Email address:

## Weather Data Retrieval

- Go to <http://agweather.mesonet.org>
- Click "Weather"
- Next, click "PAST WEATHER DATA"
- Then select "Daily Data Retrieval"
- Choose the dates, variables and Mesonet stations you are interested in, enter your email address and click "Get Data"

coping with

# DISASTERS

When it comes to crop disasters, relief measures are in place to help producers get through the tough times. Relief comes in the form of a secretarial governmental disaster declaration.

“A secretarial disaster declaration occurs when there is a disaster event that affects crop production and is widespread,” said Rod Wanger, Ag Program Specialist for Farm Service Agency. “It could include a county, several counties or a region.”

The Governor’s office initiates the process by sending a letter to the Secretary of Agriculture regarding a specific crop loss. When the Secretary of Agriculture receives the letter, it prompts the Farm Service Agency to go to the affected counties and do a loss assessment report.

“If a county has a loss of 30 percent or more of a crop, then it is considered for a secretarial disaster declaration,” said Wanger.

Once a secretarial disaster declaration is in place, farmers in that area are eligible for a Farm Service Agency emergency loan and/or the Supplemental Revenue Assistance Payments program (SURE).

An emergency loan offers low interest rates to affected farmers. The SURE program looks at a particular farmer’s estimated revenue versus his actual revenue, and then pays a percentage of the difference.

It is important to remember, however, that not everyone will receive disaster support. “Just because an area has received a disaster declaration doesn’t necessarily mean that a farmer is eligible or that they will receive help,” said Wanger. “It is on a case-by-case basis.”

Government officials will likely wait until closer to harvest to initiate any disaster declarations in regards to the recent drought and freeze damage to Oklahoma’s wheat. From then, it could take approximately six to eight weeks after the request is submitted for the designation to be made by the Secretary.

For more information about the SURE program, [click here](#).

For more information about emergency farm loans, [click here](#).