

agweather connection

OKLAHOMA'S WET WHEAT

This winter, much of Oklahoma experienced above average precipitation in the form of rain, snow and ice. Although the inclement weather slowed holiday travelers, toppled utility poles and cost the state millions of dollars, the precipitation might also have had a significant impact on Oklahoma's wheat.

"From a positive standpoint, there was enough rainfall this year to get a very good stand, tillering and root system developed on about 60 percent of the acres," said Mark Hodges, Executive Director of Oklahoma Genetics, Inc. "From a negative standpoint, it was too wet to plant in a timely manner on about 40 percent of the acres."

As fall faded to winter, the moisture kept coming. The Christmas Eve blizzard brought frigid temperatures, high winds and blowing snow. Although snow and ice can help insulate wheat, the blizzard conditions caused winter kill.

"The December blizzard and the cold temperatures in early January without snow caused some winter kill damage

to the wheat in some areas of the state," said Mike Schulte, Executive Director of the Oklahoma Wheat Commission. "The damage from those cold temperatures is too early to tell."

Another potential problem that could plague Oklahoma wheat is limited root growth. "The excess precipitation in the southwestern part of the state probably limited root growth. So, we have a shallow-rooted crop," said Jeff Edwards, Small Grains Extension Specialist at OSU. "If we continue to get moisture, that is not a problem. However, if the rain stops, we have plants that do not have the rooting system necessary to access moisture stored deeper in the soil profile."

Disease is also a concern during wet years. On a positive note, the cold winter killed rust spores that were present last fall, but that could change if Oklahoma experiences a wet spring, said Edwards.

As spring approaches, rainfall throughout March, April and May can have a significant effect on Oklahoma's wheat.

"If March and April weather patterns bring moisture up from the south, they can also bring leaf and stripe rust spores with the moisture," said Edwards.

In addition, many producers are trying to top dress nitrogen and herbicides in early March. The window for both of these applications closes early in the month. With very wet conditions in many areas of the state it is questionable that all the needed nitrogen will be available at the optimum time, said Hodges.

Although Oklahoma wheat may have been damaged by the cold, wet weather, the potential for a successful harvest is still on the horizon if temperatures and rainfall cooperate.

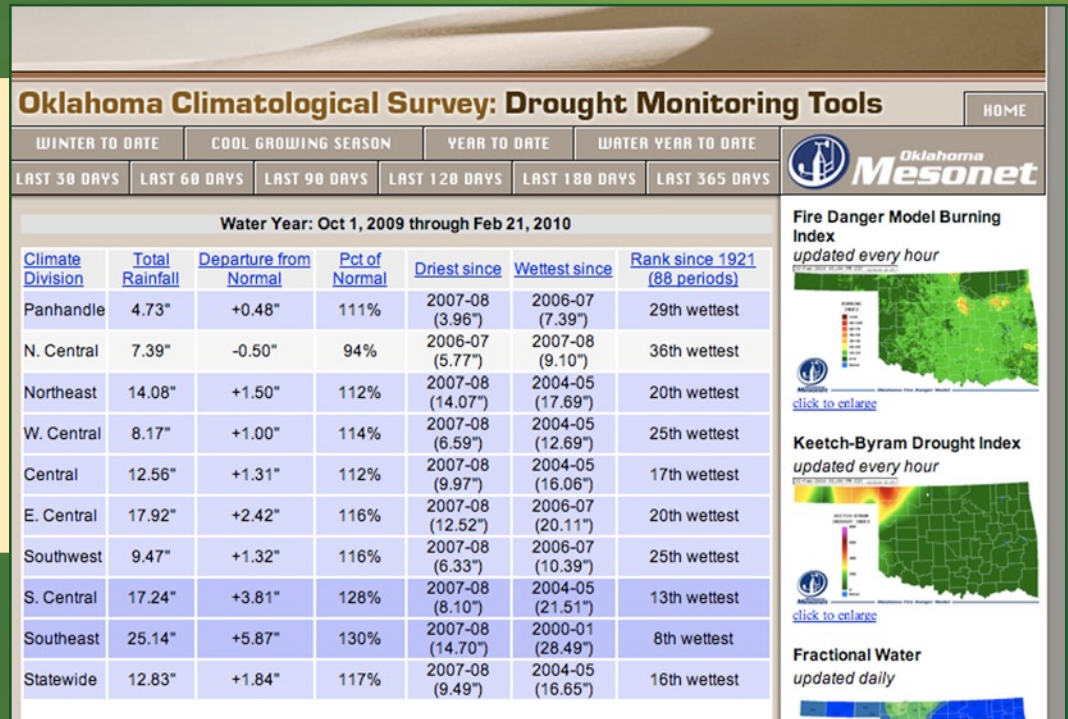
"At this point, I don't think anyone is panicking. And, no one is turning down moisture yet," said Tim Bartram, Executive Director of the Oklahoma Wheat Growers Association. "It can turn dry awful fast in Oklahoma. We are probably in much better shape than we were this time last year."



MOISTURE GAUGE

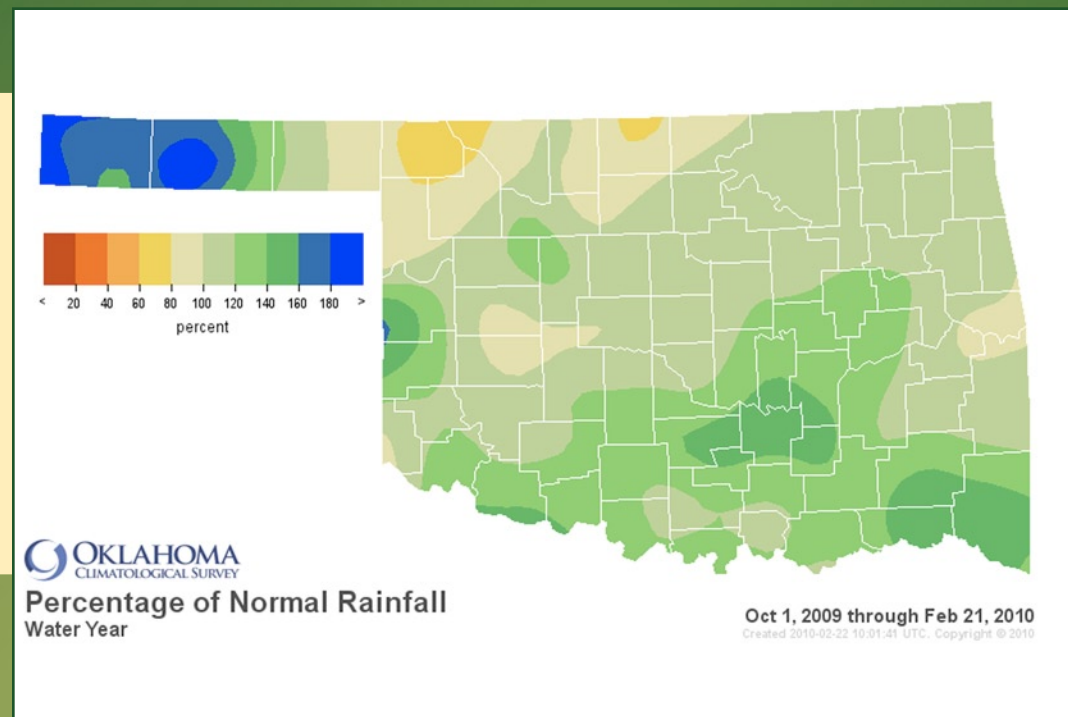
Water Year to Date

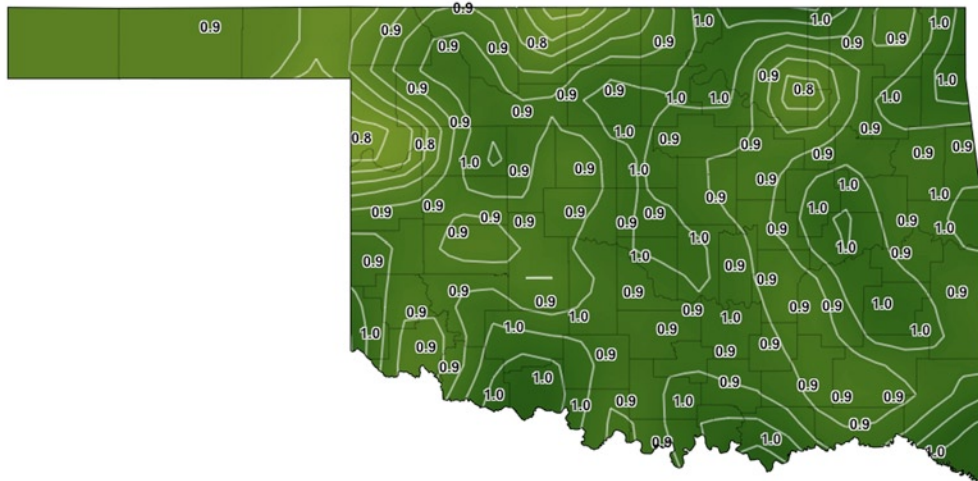
- Start at <http://aqweather.mesonet.org>
- Click "Climate" from the horizontal menu
- Select "OKLAHOMA CLIMATE DATA" from the left menu
- Choose "Drought and Rainfall Update"
- Finally, click "WATER YEAR TO DATE" from the horizontal menu
- The water year runs from Oct. 1, 2009 through September 30, 2010. For more information about water years, see page 4



Percentage of Normal Rainfall

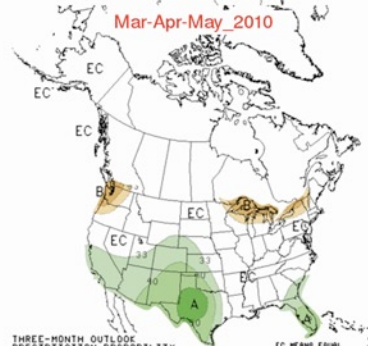
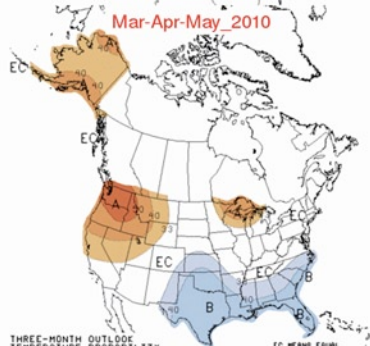
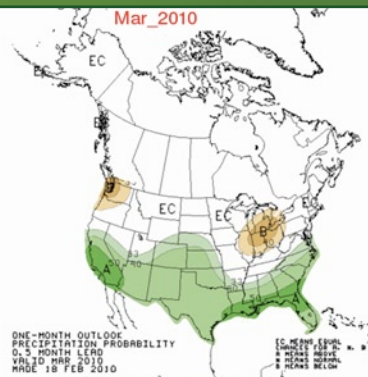
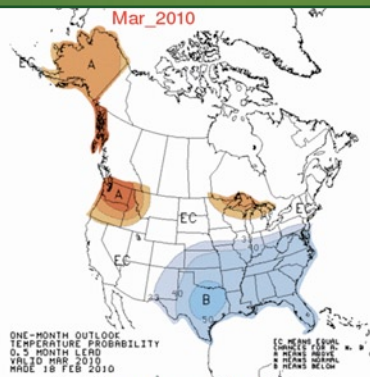
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- Click "Climate" from the horizontal menu
- Select "OKLAHOMA CLIMATE DATA" from the left menu
- Choose "Drought and Rainfall Update"
- Click "WATER YEAR TO DATE" from the horizontal menu
- Finally, scroll down to the bottom of the page and click on the "Percentage Normal" map in the bottom right corner





Soil Moisture at 10 inches

- Start at <http://agweather.mesonet.org>
- Click "Soil/Water" from the horizontal menu
- Choose "SOIL MOISTURE" from the left menu
- Finally, select "10-in. Soil Moisture"
- The legend ranges from 0 to 1, with 0 indicating totally dry soil and 1 indicating totally saturated soil



Long-Range Forecast

- Start at <http://agweather.mesonet.org>
- Click "Forecast" from the horizontal menu
- Then choose "LONG RANGE FORECASTS" from the left menu
- Finally, select "30-day and 90-day Outlooks"
- The long-range outlook is predicting below average temperatures and above average precipitation for March, April and May for much of the state

What is a water year?

By Gary McManus, Associate State Climatologist

Q. What is a water year?

A "water year" is a hydrologic term for a 12-month period used to base measurements of hydrological data upon, for example precipitation, streamflow, etc.

Q. When does it start?

In the U.S., the water year starts on October 1 and runs through September 30. The year is designated by the period in which the water year ends. So this current water year, which started on October 1, 2009, will actually be known as the 2010 water year.

Q. How and why is a water year different than a "regular" year?

A water year is different than a regular year in that its beginning and ending points are adjusted to fit the needs of whomever is setting the period.

Q. What is the significance of starting a water year on Oct. 1?

October 1 is generally thought to be the transition from a period of enhanced water use to a period of recharge. Evapotranspiration and water usage decline after October 1 and therefore winter precipitation can "recharge" the available supply. So, starting the water year on October 1 allows for a natural reset of the statistics.

Q. Why is this important to agricultural producers?

Obviously water is important to agricultural producers year-round, but the winter recharge period is vital since it is an indication of how much the deficit or surplus will be going into the spring growing season. It also is coincidental to the planting season in the fall, so a bad start to the water year can spell disaster for the winter wheat crop.