



**Weather
Observer**

October 3, 2013

BAE

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September 2013 Monthly Summary

September is normally one of the driest months of year for the Bluegrass State and this year was no exception. The state was below normal by about a half inch for the month with a little more than 3 inches seen on average. Most of the time, the Commonwealth was under the influence of high pressure, which acted to keep dry conditions in place. This was the trend every week except for the third week of the month when the state received a soaking rainfall event. A strong cold front and extremely moist air mass led to rainfall totals around an inch statewide. A narrow corridor extending through central and bluegrass portions of the state received more than 2 inches. This was the only significant rainfall for the month with other

boundaries playing a larger role in cooling temperatures. There were multiple occasions where temperatures became fairly cool across the Bluegrass State, but frost never became an issue. Lows in the lower 40s were common on numerous occasions, with one occurrence on September 14th. This was around 15 to 20 degrees below normal for this time of the year. Overall, although the state did see a rather dry month, the Commonwealth has still been well ahead in the precipitation category since the end of the drought in 2012. Below (Figure 1) is a graph showing the monthly deviations since last September. It can be seen that the Bluegrass State is 3.69 inches above normal over that time span.

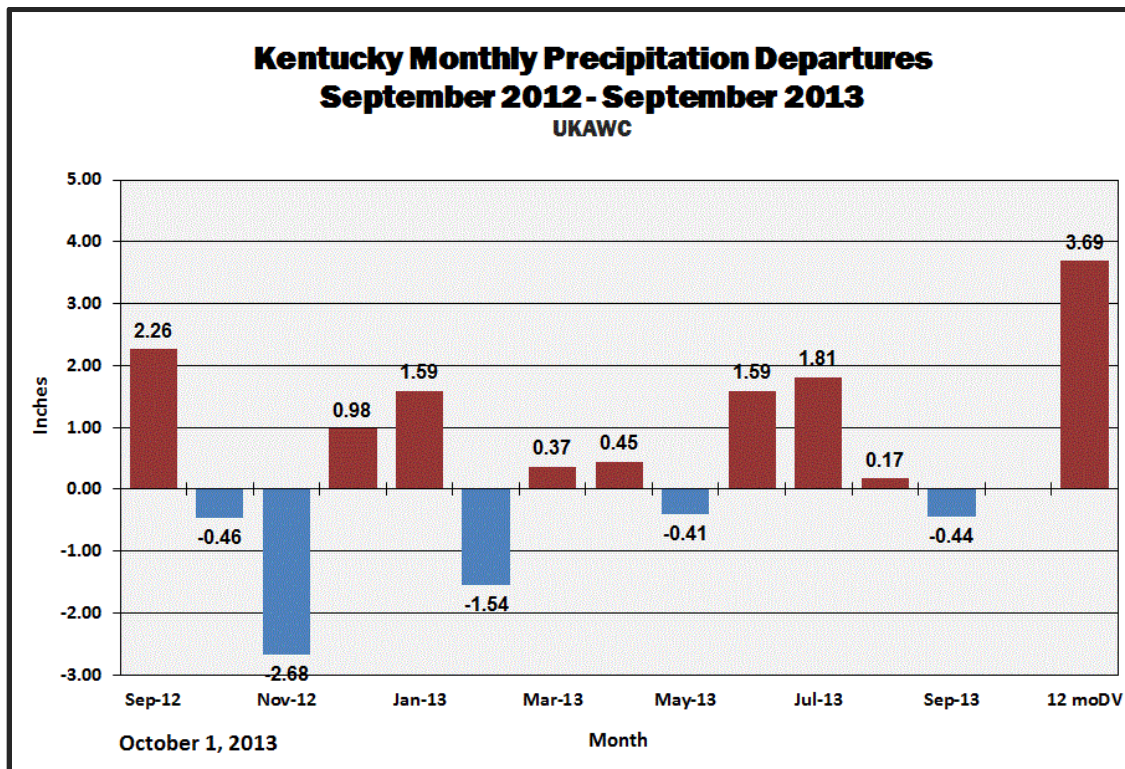


Figure 1

Summarized and averaged data for the period 20130901 to 20130930 (Last 30 Days)
(Not for Legal purposes. Departure from Norms based on climate divisional Averages)

STATION	AIR TEMPERATURE					PRECIPITATION			ExtremeTemp		
	MAX	DEV	MIN	DEV	AVR	DEV	TOTAL	DEV	%NORM	HI	LO
WEST (CD1)	81	-1	60	1	71	0	3.85	0.36	110	95	44
CENTRAL (CD2)	80	-1	60	2	70	1	3.83	-0.04	99	93	43
BLUEGRASS (CD3)	79	-1	58	1	68	0	2.72	-0.50	84	92	40
EAST (CD4)	79	-1	59	3	69	1	1.94	-1.54	56	94	42
STATE	80	-1	59	2	70	1	3.08	-0.44	88	95	40

Data obtained from KY Mesonet and NWS Stations

Forecast

When the calendar rolls over into October, the Commonwealth enters into its driest time of the year. Normally the state only sees around 3 inches fall over the course of the month, but this could very well not be the case this year based on the current forecast. The weekend (10/4 – 10/6) will start off relatively dry with only isolated chances in place as the state will be under the influence of an upper level ridge of high pressure. After a day on Saturday in which rainfall will be scattered in nature, a cold front will move through the state Sunday, bringing more widespread chances for precipitation. Focus will then shift to the possible remnants of a tropical storm making its way northeast. The current forecast track (Figure 2) has the remnant system passing through eastern portions of the state. Models are indicating rainfall totals between 1 and 2 inches through October 10th.

Temperature-wise, the start of October is usually characterized with average highs in the low to mid 70s and dropping into the low 50s at night. By the end of the month, these averages drop to the mid 60s and low 40s, respectively. Southwesterly flow will keep the Commonwealth very mild for the first half of the upcoming weekend with highs in mainly the low to mid 80s. These will then drop down into the upper 60s to low 70s by early next work week with the cold front's departure as stated above.

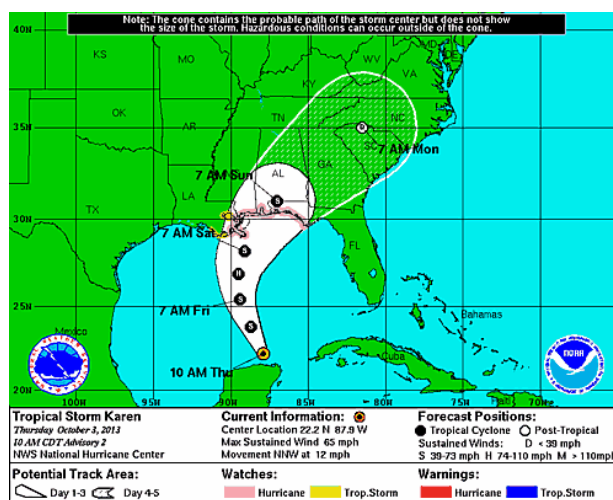


Figure 2

Looking farther out, outlooks are calling for the Commonwealth to see above normal temperatures and near normal rainfall farther into next work week. This trend is then forecasted to continue through the month of October. The three month outlook through December then leans toward near normal temperatures and precipitation.

3 Month Outlook (OCD)
Near Normal Temperatures and Rainfall

Frost/Freeze Information for Kentucky

It is getting to that time of the year when frost and freeze will begin to become an issue when it comes to impacts on agriculture. Luckily this year, the state has yet to see the temperature go below 40 degrees, but according to normal frost/freezing dates, this is pretty common. Around Kentucky, the first frost or 36 degree reading is normally not seen until around the middle of October. In Bowling Green and

Lexington, this date is October 12th. This is then followed by the first freezing temperatures at 32 degrees which is normally felt in the latter half of the month. Figure 3 below, from the Midwestern Regional Climate Center, distinguishes the average date for a location's first observable freeze. It can be seen that Kentucky falls within an average date of somewhere between October 21st and the 30th.

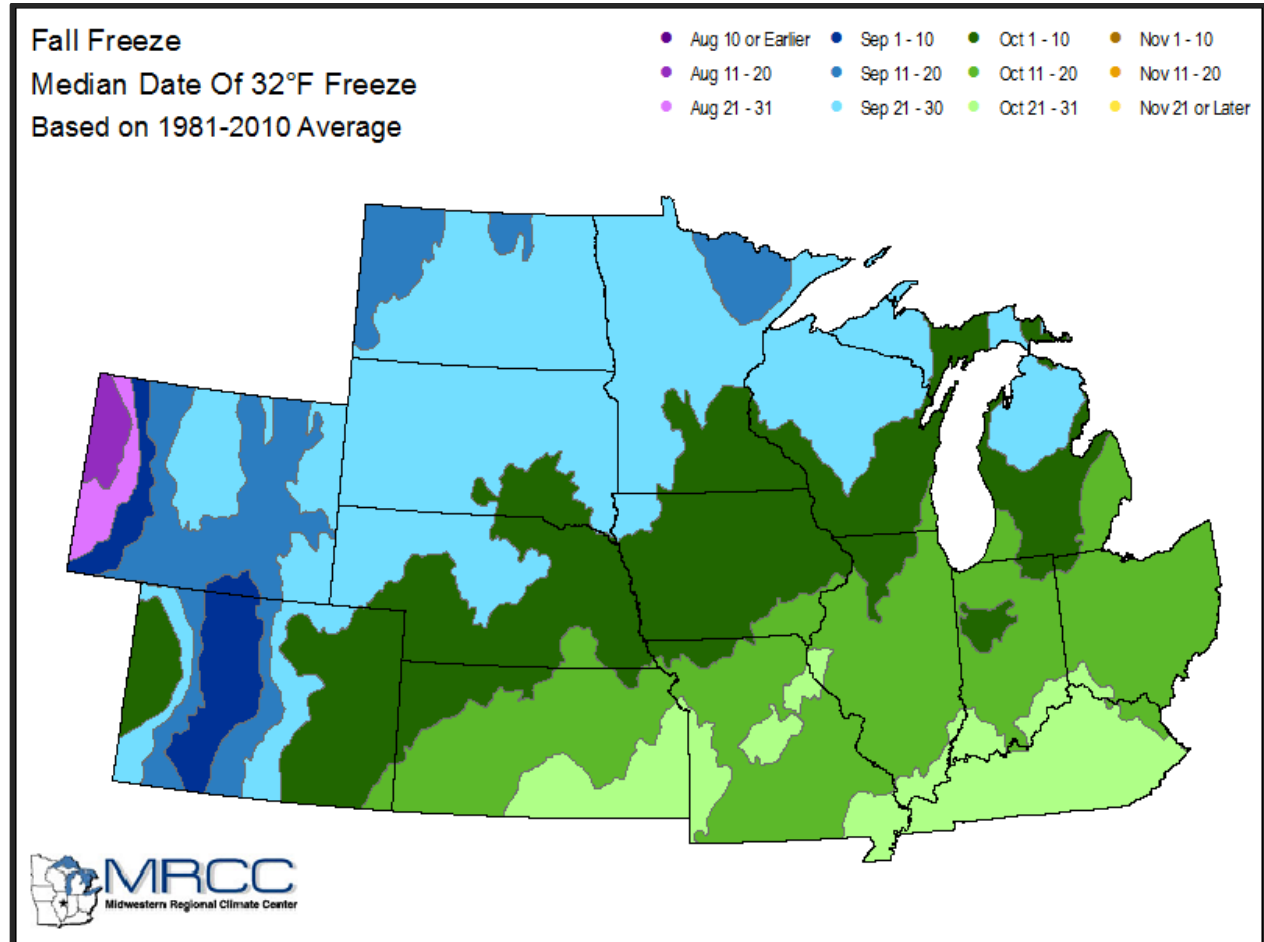


Figure 3

The last cut-off temperature that is normally identified in regards to agriculture is a hard freeze at 28 degrees, which usually holds off until early November (Figure 4) for this area. It is important to say that these are just averages, and frost or a freeze can happen sooner or later. Just this past year, Lexington hit 36 degrees on September 23rd, which is nearly 3 weeks before the average date. On the other side of the spectrum, Lexington didn't hit this threshold until November 4th in 1971. Heading into Eastern Kentucky, these dates can be much earlier, especially in low lying and sheltered locations, such as the valleys. As of right now, the forecast is still leaning toward no frost events at least through next work week (10/7 – 10/11).

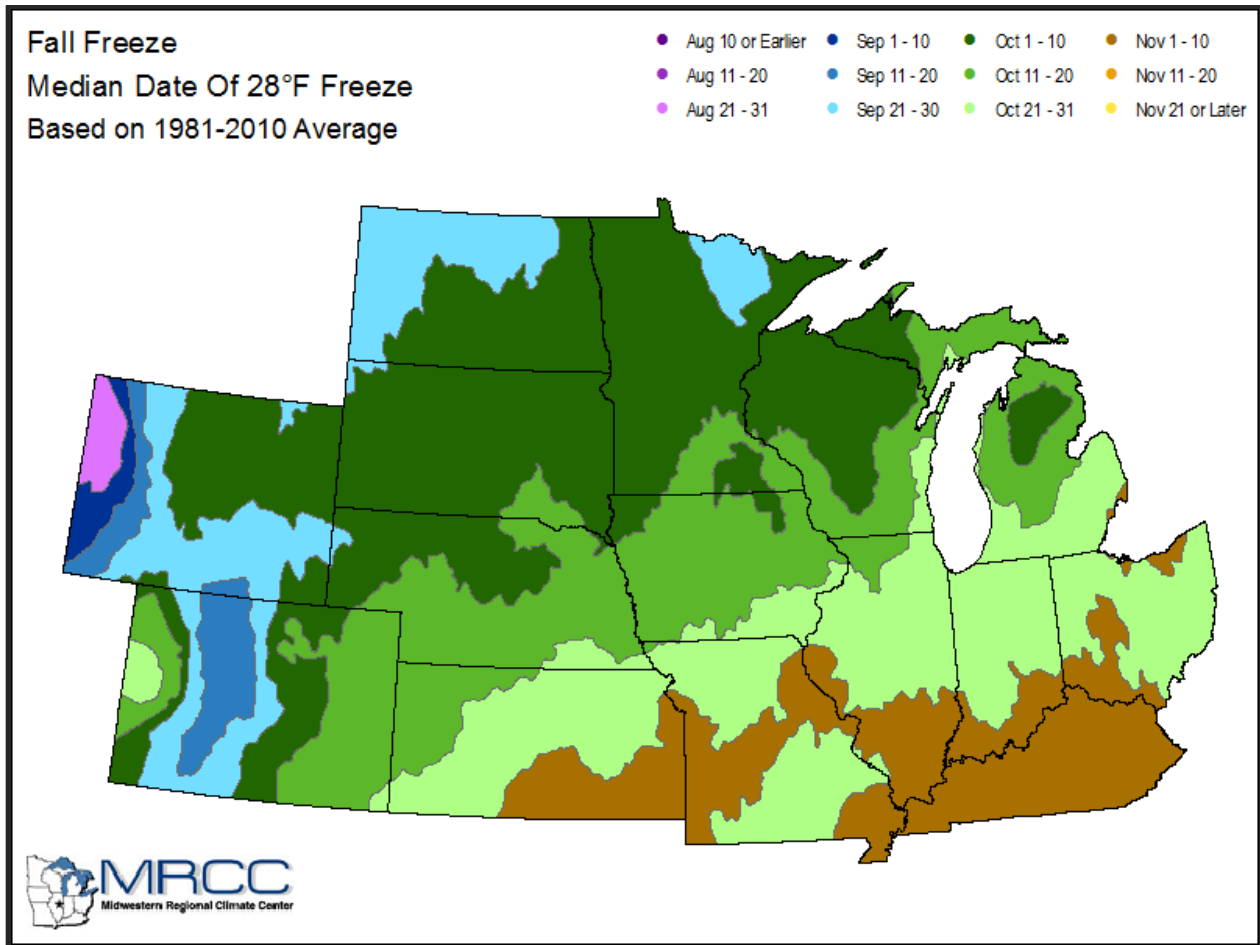


Figure 4

“Behind the scenes”, the UK Ag Weather Center plays a larger role in monitoring the state’s susceptibility to frost and freeze during the fall and spring seasons. We collaborate with National Weather Service meteorologists and other University Extension specialists in analyzing any potentially damaging situation to the Commonwealth’s agricultural sector. In doing so, advanced warning allows for the opportunity of preventative action. More information about the program can be found [here](#).

Other News

The Community Collaborative Rain, Hail, and Snow Network ([CoCoRaHS](#)) is currently looking for more observers across the state of Kentucky. Observers are asked to record daily measurements of rain or snowfall accumulations. New to 2012, observers can now take readings of evapotranspiration. Kentucky observers provide a great volunteer service to the community, the county and the state by providing information on precipitation, snowfall, and snow depths. The information is used by government and university scientists, community officials, farmers, county emergency managers, watershed managers, drought monitors, and by your friends and neighbors. More information about this organization and how to join can be found here at:

<http://www.cocorahs.org/state.aspx?state=ky>

October Vegetable Gardener's Calendar for Western KY

October 1st	- Start seeds outdoors for RADISHES.
October 15th	- Sow sets of Egyptian tree or multiplier ONIONS. - Harvest carrots before heavy freeze.
NOTE: Subtract 10 days for Central KY and 15 for Eastern KY to these dates for fall crops	

October Crop Operations

	First Week	Second Week	Third Week	Fourth Week
Small Grains	-----	20% of wheat sowed	45% of wheat sowed	60% of wheat sowed
Soybeans	-----	10% harvested 80% of plants shedding leaves	30% harvested 95% of plants shedding leaves	50% harvested
Tobacco	-----	Harvest ENDS for all the crop	8% of crop stripped	15% of crop stripping
Corn	-----	50% of crop harvested	60% of crop harvested	70% of crop harvested
General Farm Operations	-----	Reseed Grains	-----	Fall treatment of tobacco beds. Most farmers use Methyl Bromide

October Beef Operations

Spring Calving Herd	<ul style="list-style-type: none"> • Wean the calves.
Fall Calving Herd	<ul style="list-style-type: none"> • Fall calving continues. • Check calving pastures frequently. • Move cows with young calves to the best pasture.
All Cattle	<ul style="list-style-type: none"> • Remove fly-control ear tags.
Forages	<ul style="list-style-type: none"> • Apply phosphate, potash, and lime according to soil test recommendations. • Do not harvest or graze alfalfa fields to replenish root reserves. • Graze crop residues. (Beware of grazing restrictions on certain crop herbicides.) • Beware of prussic acid (cyanide) POISONING from grazing summer annual grasses following frost. • Start inventory of hay supplies and needs. • Test hay quality.