



NATIONAL AGRICULTURAL STATISTICS SERVICE

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KENTUCKY WEEKLY CROP & WEATHER REPORT



In Cooperation with:
 Univ. of Ky - Agr'l Weather Center
 U.S. Dept. of Commerce - NOAA
 Kentucky Department of Agriculture
 Cooperative Extension Service

LELAND E. BROWN, Director

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SAL 9-07

AGRICULTURAL NEWS: Rainfall was below average for the second week in a row. The cold front that moved through the Commonwealth midweek made cooler temperatures the trend until the end of the weekend. Precipitation for the week totaled 0.49 inches Statewide, which was 0.57 inches below normal. **Topsoil moisture** was rated as 5 percent very short, 28 percent short, 59 percent adequate, and 8 percent surplus. **Subsoil moisture** was rated 4 percent very short, 25 percent short, 65 percent adequate, and 6 percent surplus. There were 5.3 days suitable for fieldwork. Farmers' primary activities for the week were planting corn and soybeans, setting tobacco, and harvesting hay.

TOBACCO: Tobacco setting is ahead of last year and the five-year average. Thirty-seven percent of the burley tobacco has been set compared with 21 percent for last year and the five-year average of 20 percent. Thirty-one percent of the dark tobacco has been set, ahead of last year's 14 percent and the five-year average of 18 percent. Farmers report the tobacco crop condition as 2 percent poor, 31 percent fair, 58 percent good, and 9 percent excellent.

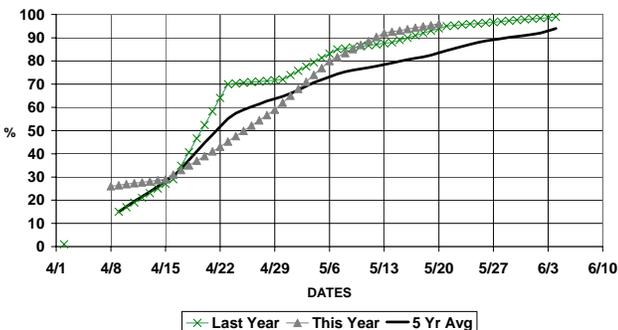
ROW CROPS: Corn producers have seeded 96 percent of their acres, compared to 94 percent last year, and 83 percent for the five-year average. Crop

emergence was reported at 86 percent, above last year's 80 percent and the five year average of 72 percent. The average emerged corn height was 9 inches, with the most advanced height at 15 inches. Corn condition was rated 1 percent poor, 17 percent fair, 57 percent good, and 25 percent excellent. As of Sunday, May 20, soybeans were 38 percent planted, compared to 25 percent last year and 26 percent for the five year average. Soybeans emerged was reported at 10 percent, equal to last year and below the five year average of 11 percent.

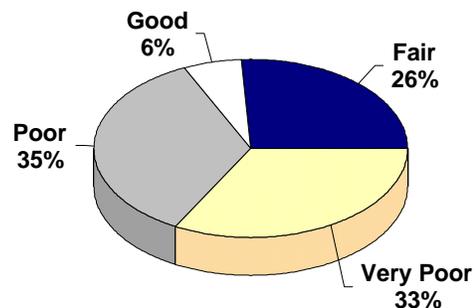
SMALL GRAINS: Winter wheat condition was rated 33 percent very poor, 35 percent poor, 26 percent fair, and 6 percent good. The winter wheat harvest is expected to begin June 14, and barley on June 6. Poor yields are expected from the freeze damaged winter wheat crop, and some farmers report they also expect a poor barley harvest.

OTHER CROPS AND PASTURE: Thirty-seven percent of sorghum acreage had been planted equal to last year at this time, and above 23 percent as the 5-year average. Pasture condition was rated 13 percent poor, 41 percent fair, 40 percent good, and 6 percent excellent. The hay crop condition was rated 5 percent very poor, 29 percent poor, 39 percent fair, 25 percent good, and 2 percent excellent.

CORN PLANTING PROGRESS



WHEAT CONDITION (May 20)



KENTUCKY CROP PROGRESS

WEEK ENDING MAY 20, 2007

Crop Stage	This Week	Previous Year	5-Yr. Avg.	Previous Week	
				KY	U.S.
Percentage					
Corn					
Planted	96	94	83	92	78
Emerged	86	80	72	77	39
Soybeans					
Planted	38	25	26	19	32
Emerged	10	10	11	0	6
Sorghum Planted	37	37	23	9	28
Burley Tobacco Set	37	21	20	21	NA
Dark Tobacco Set	31	14	18	19	NA

(NA)Data Not Available.

SOIL MOISTURE

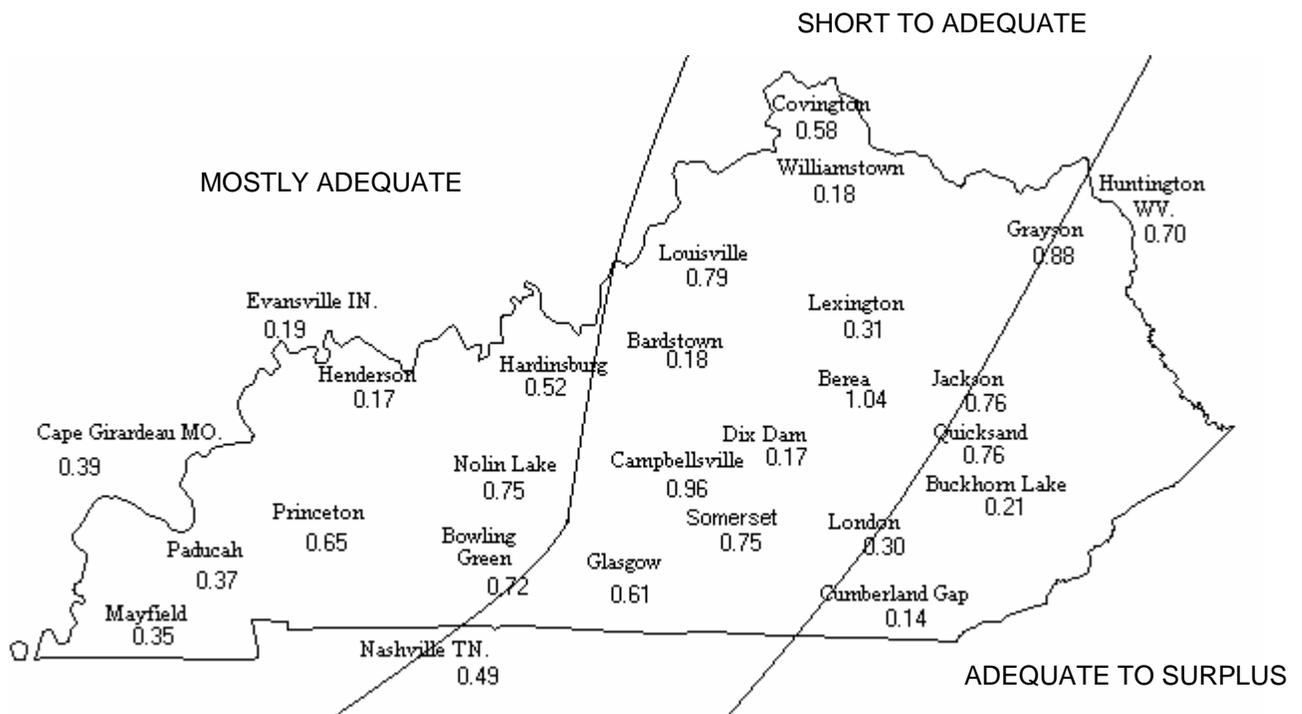
WEEK ENDING MAY 20, 2007

	This Week	Previous Week
TOPSOIL		
Very Short	5	0
Short	28	19
Adequate	59	73
Surplus	8	8
SUBSOIL		
Very Short	4	0
Short	25	15
Adequate	65	76
Surplus	6	9

KENTUCKY CROP CONDITIONS (Percent)

CROP	WEEK ENDING MAY 20, 2007					WEEK ENDING MAY 13, 2007				
	VERY POOR	POOR	FAIR	GOOD	EXCEL-LENT	VERY POOR	POOR	FAIR	GOOD	EXCEL-LENT
Corn Emerged	0	1	17	57	25	0	1	20	56	23
Wheat	33	35	26	6	0	40	30	24	6	0
Pasture	0	13	41	40	6	1	12	40	40	7
Hay Crop	5	29	39	25	2	5	23	42	26	4
Tobacco Set	0	2	31	58	9	0	2	23	63	12

PRECIPITATION MAP AND TOPSOIL MOISTURE DELINEATION WEEK ENDING MAY 20, 2007



KENTUCKY WEATHER SUMMARY, MAY 14 – 20, 2007:

Below Normal Temperatures and Below Normal Rainfall:

With limited rainfall at mid-week, it was the second week straight with below normal rainfall. Temperatures were very warm until a cold front moved through on Wednesday. Cool temperatures were the trend until Sunday. Patchy frost was reported in eastern sections of the State on Saturday morning.

Temperatures for the period averaged 62 degrees across the State which was 5 degrees below normal and 8 degrees cooler than the previous week. High temperatures averaged from 76 in the West to 74 in the East. Departure from normal high temperatures ranged from 5 degrees below normal in the West to 2 degrees below normal in the East. Low temperatures averaged from 49 degrees in the West to 48 degrees in the East. Departure from normal low temperature ranged from 8 degrees below normal in the West to 8 degrees below normal in the East. Extreme high temperatures were in the upper 80s and extreme low temperatures were in the mid 30s.

Precipitation (liq. equ.) for the period totaled 0.49 inches statewide which was 0.57 inches below normal. Precipitation totals by climate division, West 0.35 inches, Central 0.59 inches, Bluegrass 0.45 inches and East 0.56 inches, which was 0.75, 0.51, 0.57 and 0.45 inches below normal. By station, precipitation totals ranged from a low of 0.14 inches at Cumberland Gap to a high of 1.04 inches at Berea.

Tom Priddy

KENTUCKY TEMPERATURES AND RAINFALL FOR WEEK ENDING SUNDAY, MAY 20, 7:00 P.M.

Weather Station	Rainfall			Deviation From		Air Temperature				Growing Degree Days		
	Last Week	Since April 1	Last Four Wks	Norm Since Apr. 1	Norm Last 4 Wks	High	Low	Wkly. Avg.	Dev. From Norm	Last Week	Since Apr. 1	Dev. Since Apr. 1
	(Inches)					(Degrees Fahrenheit)						
Bardstown	0.18	6.23	2.97	-0.53	-0.95	81	41	62.4	-4	100	633	+33
Berea	1.04	6.39	3.52	-0.97	-0.72	83	39	60.3	-5	89	612	-8
Bowling Green	0.72	7.22	4.89	-0.29	+0.55	85	42	63.3	-4	102	683	+63
Bristol	0.23	3.40	1.05	-2.42	-2.35	81	38	59.8	-6	85	564	+14
Buckhorn Lake	0.21	4.53	1.27	-1.87	-2.38	81	40	61.4	-4	91	603	+53
Cape Girardeau	0.39	5.60	2.84	-2.18	-1.69	87	40	61.9	-7	97	673	+33
Campbellsville	0.96	9.02	4.80	+0.93	+0.19	83	38	61.1	-6	96	645	+25
Covington	0.58	3.89	1.51	-2.62	-2.25	85	39	61.1	-5	89	538	+18
Cumberland Gap	0.14	5.92	2.13	-1.26	-2.06	82	40	61.2	-5	90	605	+55
Dix Dam	0.17	6.45	2.96	-0.83	-1.22	82	40	60.9	-5	91	587	-13
Evansville	0.19	6.03	2.93	-1.05	-1.21	87	43	63.5	-5	100	642	+52
Glasgow	0.61	7.44	3.46	-0.37	-1.02	85	38	62.8	-4	106	698	+138
Grayson	0.88	5.19	2.43	-1.19	-1.29	83	37	60.7	-5	93	572	+72
Hardinsburg	0.52	6.04	2.89	-1.41	-1.40	84	41	63.2	-4	99	666	+46
Henderson	0.17	7.47	2.91	+0.27	-1.16	86	42	62.2	-7	94	637	+17
Huntington	0.70	4.16	1.75	-2.19	-1.96	84	36	60.6	-5	94	575	+25
Jackson	0.76	3.40	1.76	-3.59	-2.22	81	41	60.6	-5	87	595	+45
Lexington	0.31	5.33	2.29	-1.43	-1.63	82	40	60.8	-5	89	552	+32
London	0.30	5.44	3.47	-1.23	-0.32	82	38	60.4	-5	90	604	+54
Louisville	0.79	7.16	4.04	-0.05	-0.07	86	42	62.2	-5	95	600	+10
Mayfield	0.35	4.18	1.43	-4.10	-3.15	83	40	61.5	-7	93	612	-58
Nashville	0.49	6.05	3.58	-1.47	-0.73	83	46	64.1	-3	102	715	+45
Nolin Lake	0.75	7.09	4.34	-0.98	-0.40	84	42	63.1	-4	100	679	+79
Paducah	0.37	5.16	1.81	-3.04	-2.71	88	42	63.9	-5	103	694	+54
Princeton	0.65	6.24	2.94	-1.76	-1.54	86	42	63.9	-5	109	760	+110
Quicksand	0.76	3.36	1.77	-3.63	-2.21	81	40	61.6	-4	93	604	+54
Somerset	0.75	5.91	3.16	-1.71	-1.27	83	37	58.5	-7	82	573	-27
Spindletop	0.41	4.99	2.11	-1.77	-1.81	81	40	60.0	-6	84	539	+19
Williamstown	0.18	6.54	1.92	-0.46	-2.03	84	39	60.9	-5	90	542	+22

The above information is provided by Tom Priddy, Kentucky Extension Agricultural Meteorologist, University of Kentucky Agr'l Weather Center (859)257-3000 ext 245. E-mail: priddy@uky.edu Additional Ky weather data available on Internet at: <http://www.agwx.ca.uky.edu/>

A GUIDE TO GROWING DEGREE DAYS

For the 2007 growing season, the Kentucky Field Office of the National Agricultural Statistics Service in cooperation with the National Weather Service will provide weekly accumulated growing degree days (GGD) data.

These GDD are calculated according to the definition:

$$\text{GDD} = \frac{\text{Daily Max } (\leq 86^\circ \text{F}) + \text{Daily Min } (\geq 50^\circ \text{F})}{2} - 50^\circ \text{F}$$

Maximum temperatures above 86° F are entered as 86° and minima below 50° are entered as 50°. This modification is designed to take into account the differing response of plants to quite high or quite low temperatures. There are several methods of calculating GDD, but the above formula is most widely accepted. This adjusted 50°F method of calculating GDD has been adopted by the Hybrid Seed Corn Industry as a basis for a uniform maturity rating system.

At 50°F corn grows hardly at all. As the temperature rises up to the range of 80° to 86°F, corn grows faster if moisture is adequate. When the temperature rises above 86°F the roots have increasing difficulty taking in water fast enough to keep plant cells turgid (full of water) and working at top speed. When soil moisture is short, the optimum temperature is less than 80°F. With perfect moisture supply the optimum temperature is likely 90° to 95°F.

The concept of growing degree days is still under study and refinement. In its short existence growing degree days has proven to be a much better gauge for rating corn maturity than the old "days of maturity" rating. The use and importance of GDD will improve as information is collected over the years.

Corn Percent Planted

State	May 13 2007	Prev Week	Prev Year	5-Yr Avg
CO	63	38	60	59
IL	93	72	94	83
IN	78	42	71	63
IA	77	53	90	87
KS	76	49	88	88
KY	92	80	88	78
MI	60	31	77	59
MN	88	70	73	84
MO	65	58	96	87
NE	73	40	86	79
NC	99	97	99	95
ND	62	38	53	61
OH	88	38	88	70
PA	62	32	73	60
SD	48	30	61	66
TN	98	92	93	93
TX	92	82	95	94
WI	76	38	72	58
ALL	78	53	83	78
These 18 States planted 93% of last year's corn acreage.				

Soybean Percent Planted

State	May 13 2007	Prev Week	Prev Year	5-Yr Avg.
AR	43	22	40	39
IL	44	7	29	32
IN	39	10	30	33
IA	24	4	38	37
KS	9	3	11	21
KY	19	6	17	16
LA	70	58	66	51
MI	19	7	50	31
MN	45	14	19	32
MS	88	72	93	82
MO	15	7	24	24
NE	17	2	29	26
NC	16	7	17	17
ND	18	3	17	18
OH	64	14	65	42
SD	6	2	12	14
TN	28	10	17	16
WI	32	6	24	22
ALL	32	10	31	31
These 18 States planted 96% of last year's soybean acreage.				

This release and others can be viewed on the Internet at <http://www.nass.usda.gov/ky/> For a free E-Mail subscription of the Kentucky Weekly Crop & Weather report, on the Internet go to <http://www.nass.usda.gov/sub-form.htm> and follow the instructions.