



Kentucky Agricultural Statistics Service
 P.O. Box 1120
 Louisville, Kentucky 40201-1120
 (502) 582-5293 or 1-800-928-5277

KENTUCKY WEEKLY CROP & WEATHER REPORT



Prepared 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, State Statistician

November 2002 - March 2003

March 31, 2003

This first Crop & Weather Report of 2003 is a summary of winter weather. Freeze probabilities are included on the next page. The regular releases will begin on April 7. The primary purpose of the weekly report is to provide producers, agricultural media and others with up-to-date information on crops, moisture, temperatures, etc. Information is made possible through cooperation of the University of Kentucky Agricultural Weather Center, National Weather Service, County Agricultural Agents of the Extension Service, Farm Service Agency, voluntary crop reporters and weather observers.

KENTUCKY WINTER WEATHER SUMMARY 2002 - 2003				
CITY	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
LEXINGTON				
Avg. Temperature	43.0°	36.0°	27.0°	32.0°
30 Year Avg.	45.9°	36.3°	32.0°	36.4°
Precipitation	4.99"	3.96"	0.88"	4.85"
Precip. Normals	3.44"	4.03"	3.34"	3.27"
JACKSON				
Avg. Temperature	44.0°	37.0°	29.0°	34.0°
30 Year Avg.	47.7°	38.3°	33.9°	37.9°
Precipitation	3.62"	4.22"	1.89"	7.90"
Precip. Normals	4.20"	4.27"	3.56"	3.68"
PADUCAH				
Avg. Temperature	46.0°	39.0°	30.0°	34.0°
30 Year Avg.	46.8°	36.9°	32.9°	38.1°
Precipitation	2.61"	6.59"	1.45"	5.68"
Precip. Normals	4.53"	4.38"	3.47"	3.93"
LOUISVILLE				
Avg. Temperature	44.0°	37.0°	28.0°	32.0°
30 Year Avg.	47.6°	37.6°	33.0°	37.6°
Precipitation	2.70"	7.33"	1.65"	4.89"
Precip. Normals	3.80"	3.69"	3.28"	3.25"

NOVEMBER 2002 - Cooler than normal temperatures and near normal rainfall rounded out the month. Temperatures for November ranked as the 32nd coolest November and the 43rd wettest in the past century. Temperatures averaged 44 degrees, 2.6 degrees below normal. Precipitation totaled 3.89 inches statewide which was -0.15 inches from normal. Snowfall occurred on at least two occasions across the State but mostly came in flurries and totals of less than 1 inch.

DECEMBER 2002 - Temperatures for December averaged 37 degrees which was near normal. Cooler temperatures the first two weeks of December were offset by very mild weather during the latter half of the month especially during the third week when temperatures surged into the low to mid 60's. It was also a wet month with field operations stalled most of the month. December 2002 was the 27th wettest and 51st coolest December in the past century. Several snow and freezing precipitation events occurred. Snowfall totals were generally 1 to 8 inches. Precipitation totaled 5.02 inches statewide which was 0.74 inches above normal.

JANUARY 2003 - Kentuckian's knew it was cold this January, but maybe not the 14th coldest in the past 108 years, and despite frequent snow it was still the 18th driest January in the past 108 years. Most locations reported temperatures falling into the single digits on 5 to 7 days during the month. Temperatures averaged 28.4 degrees which was 3.4 degrees below normal. Precipitation totaled 2.08 inches which was 1.30 inches below normal. Snowfall totals ranged from 1.8 inches in Evansville to unofficial reports of near 8 inches in some West central and Southeast sections of the State.

FEBRUARY 2003 - The month was the 7th wettest February in the past century and the 30th coldest. Farmers keep busy all month dealing with the changing weather conditions. Ice and snow hampered caring for livestock and other farm work. Many farmers had to deal with debris disposal from either flooding or ice damage to trees. Muddy conditions made calving more difficult and caused some losses.

MARCH 2003 - March began with below normal precipitation and temperatures. Warmer temperatures returned at mid-month with periods of widespread heavy rain. Precipitation helped replenish soil moisture but was below normal for the month. Pastures greened with warmer late month temperatures and farmers were busy applying fertilizer.

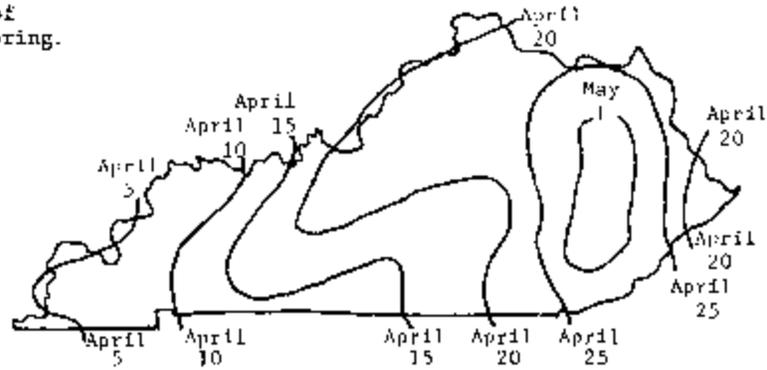
KENTUCKY FREEZE RISK: The winter of 2002-2003 began cooler than normal in November through mid December. After a very mild period in late December frigid temperatures returned making January the 14th coldest in 108 years. Cooler than normal temperatures continued through February into early March. Most areas of Kentucky still have a 90 percent chance or greater of experiencing freezing temperatures this spring. Data below are norms from the 1971 - 2000 period with the average date of the last temperatures of 32 degrees or lower being shown in the 50 percent column. All freeze data are based on temperatures at approximately 5 feet above ground and in a representative exposure.

FREEZE DATE PROBABILITIES 1971 - 2000
Last Spring Occurrence

District & Station	Earliest	90%	50%	10%	Latest
WESTERN					
Beaver Dam	March 25	April 2	April 12	April 30	May 5
Golden Pond	March 18	March 23	April 6	April 20	April 23
Henderson	March 23	March 26	April 10	April 22	April 23
Hopkinsville <u>1/</u>	March 23	March 29	April 11	April 23	May 5
Lovellsville	March 25	April 1	April 11	April 27	May 9
Madisonville	March 11	March 29	April 10	April 24	May 5
Mayfield	March 24	April 3	April 13	April 25	May 5
Owensboro <u>1/</u>	March 24	March 25	April 10	April 23	May 5
Paducah	March 7	March 24	April 9	April 22	April 29
Princeton	March 24	April 1	April 10	April 26	May 5
CENTRAL					
Bowling Green	March 24	March 26	April 10	April 23	May 5
Campbellsville <u>1/</u>	March 27	March 31	April 13	April 30	May 11
Glasgow	March 28	April 6	April 14	April 30	May 5
Greensburg	March 30	April 5	April 16	April 29	May 5
Leitchfield	April 2	April 8	April 24	May 8	May 16
Louisville	March 22	March 24	April 8	April 21	May 5
Mammoth Cave	March 29	April 6	April 25	May 12	May 16
Scottsville	March 23	March 28	April 10	April 20	April 23
BLUEGRASS					
Berea College	March 25	March 28	April 10	May 3	May 16
Carrollton	March 30	April 7	April 19	May 4	May 7
Covington	March 29	April 5	April 21	May 9	May 16
Danville	March 24	March 31	April 10	April 24	May 6
Dix Dam	February 28	March 30	April 10	April 25	May 8
Falmouth <u>1/</u>	April 3	April 9	April 24	May 10	May 18
Farmers	March 30	April 8	April 25	May 11	May 18
Frankfort	March 31	April 3	April 17	May 4	May 8
Lexington	March 27	April 2	April 13	April 28	May 5
Maysville	March 27	April 8	April 22	May 7	May 10
Shelbyville	April 8	April 11	April 29	May 14	May 18
Williamstown	March 27	April 4	April 11	April 28	May 7
EASTERN					
Ashland	April 11	April 13	May 4	May 20	June 12
Barbourville	March 26	April 11	April 24	May 8	May 10
Baxter	April 1	April 8	April 20	May 7	May 13
London	March 22	April 3	April 18	May 4	May 20
Manchester	April 10	April 20	May 3	May 17	May 27
Middlesboro <u>1/</u>	April 8	April 14	May 1	May 11	May 18
Mount Vernon	April 1	April 8	April 25	May 10	May 16
Somerset	March 25	April 9	April 23	May 7	May 16
Williamsburg	March 29	April 6	April 23	May 7	May 12

1/Station had missing data and was estimated from surrounding stations.

Average Date of
Last 32° in Spring.



Definitions of Terms used in subsequent releases.

1. **Topsoil Moisture:** (Topsoil is defined as the top 4 - 6 inches of soil.)
 - Very Short* - Soil extremely dry. Pastures and crops stressed with possible deterioration.
 - Short* - Soil dry. Seed germination and/or normal crop growth and development would be curtailed.
 - Adequate* - Soil moist. Seed germination and/or crop growth and development would be normal or unhindered.
 - Surplus* - Soil wet. Fields may be muddy and will generally be unable to absorb additional moisture. Young developing crops may be yellowing from excess moisture.

2. **Days Suitable for Fieldwork:** A "suitable" day is one where weather and field conditions allow producers to work in fields a major portion of that day.

3. **Crop Condition:**
 - Very Poor* - Extreme degree of loss to yield potential, complete or near crop failure. Pastures provide very little or no feed considering the time of year. Supplemental feeding is required to maintain livestock condition.
 - Poor* - Heavy degree of loss of yield potential which can be caused by excess soil moisture, drought, disease, etc. Pastures are providing only marginal feed for the current time of year. Some supplemental feeding is required to maintain livestock condition.
 - Fair* - Less than normal crop condition. Yield loss is a possibility but the extent is unknown. Pastures are providing generally adequate feed but is still less than normal for the time of year.
 - Good* - Yield prospects are normal or above. Moisture levels are adequate with only light disease and insect damage. Pastures are providing adequate feed supplies for the current time of year.
 - Excellent* - Yield prospects are above normal and crops are experiencing little or no stress. Pastures are supplying feed in excess of what is normally expected at the current time of year.

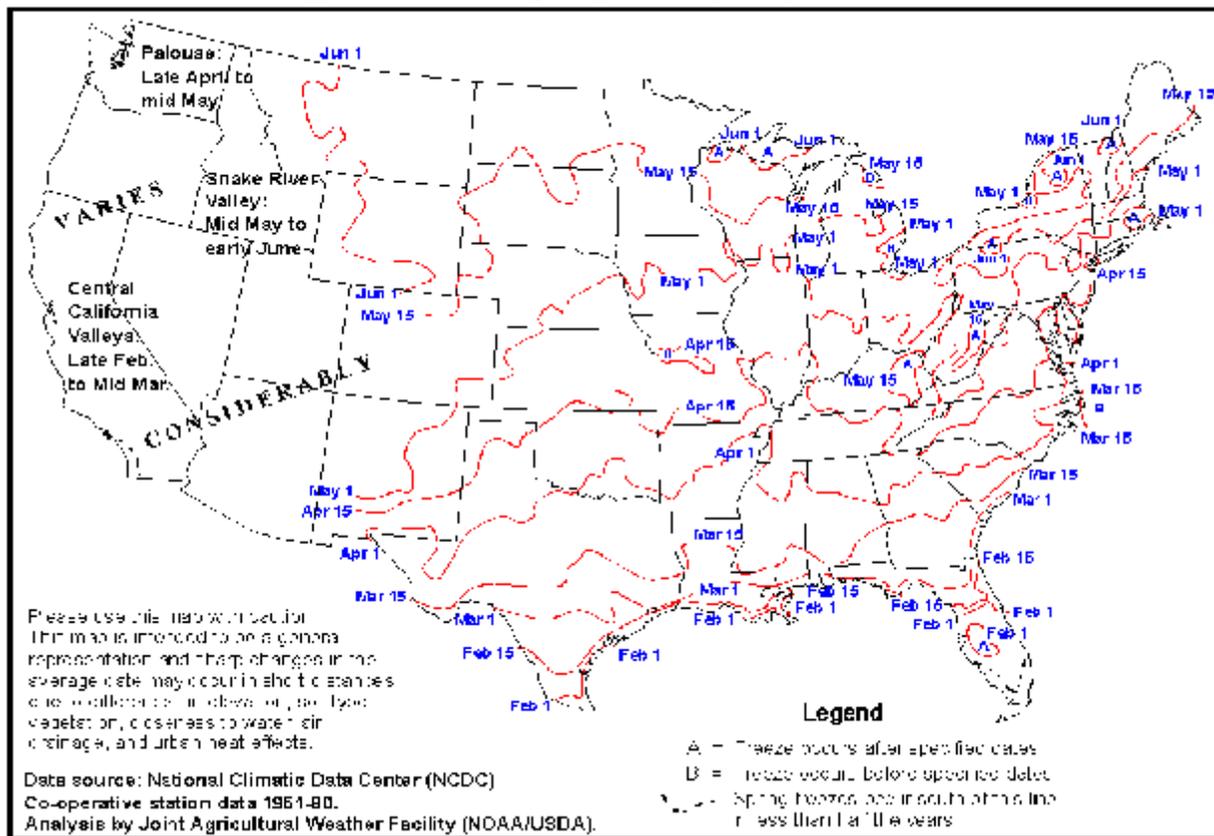
4. **Crop Progress Percents:** Percents should indicate the progress of field activities or crop development. If, for example, half of the total current year soybean acreage expected is planted, a value of 50 percent should be used. If weather conditions alter plans such that intentions are prevented, a 100 percent should be used when planting stops. Progress percents should relate to acres. An acre should be considered to be in or beyond a phenological stage when 50 percent or more of the plants in that acre are in or beyond that stage. Generally, you should consider a given field to be in a particular stage when 50 percent or more of the plants have reached or gone beyond that stage.

FREEZE INJURY IN WHEAT

Growth Stage	Injurious temp. (2 hours)	Primary Symptoms	Yield Effect
Tillering (1 - 5) ^a	12° F	Leaf chlorosis; burning of leaf tips; silage odor, blue cast to fields	Slight to moderate
Jointing (6 - 7)	24° F	Death of growing point; leaf yellowing or burning; lesions, splitting, or bending of lower stem, odor	Moderate to severe
Boot (10)	28° F	Floret sterility; spike trapped in boot; damage to lower stem; leaf discoloration; odor	Moderate to severe
Heading (10.1 - .5)	30° F	Floret sterility; white awns or white spikes; damage to lower stem; leaf discoloration	Severe
Flowering (10.51 - .54)	30° F	Floret sterility; white awns or white spikes, damage to lower stem; leaf discoloration	Severe
Milk (11.1)	28° F	White awns or white spikes; damage to lower stems; leaf discoloration, shrunken, roughened, or discolored kernels	Moderate to severe
Dough (11.2)	28° F	Shriveled, discolored kernels; poor germination	Slight to moderate

^a Numbers in parentheses refer to the Feekes scale

United States: Average dates of last spring freeze (32 F)



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, send an E-Mail message to nass-state-releases@news.usda.gov with the following command in the body of the message: **subscribe ky-crop-weather <e-mail address>**. The E-Mail address is optional; leave the address blank unless subscribing for someone else. The default address is where you sent the message from. You would unsubscribe in a similar way but use the word unsubscribe.