



2004

WHEAT
QUALITY

WEIGHTS, MEASURES, AND CONVERSION FACTORS

Bushel Weights:

Wheat & Soybeans = 60 lbs.
Corn, Sorghum & Rye = 56 lbs.
Barley (grain) = 48 lbs.; Malt - 34 lbs.
Oats = 32 lbs.

1,000 Kilograms Equals:

36.7437 bu. Wheat or Soybeans
39.3683 bu. Corn, Sorghum or Rye
45.9296 bu. Barley
68.8944 bu. Oats

Bushels to Metric Tons:

Wheat, Soybeans = bu. X .02721555*
Barley = bu. X .021772
Corn, Sorghum, Rye = bu. X .025400
Oats = bu. X .014515

Area:

1 Acre = .404694 Hectares
1 Hectare = 2.4710 Acres

1 Metric Ton Equals:

2204.622 Pounds (lbs.)
22.046 Hundredweight (cwt)
10 Quintals

Yields:

Wheat: bu. per acre X 0.6725
= quintals per hectare
Rye, Corn: bu. per acre X 0.6277
= quintals per hectare
Barley: bu. per acre X 0.5380
= quintals per hectare
Oats: bu. per acre X 0.3587
= quintals per hectare

* Kansas wheat production as of August 1, 2004 is forecast at 313.2 million bushels (8,523,910 metric tons).

KANSAS WHEAT QUALITY 2004



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Issued September 2004

FOREWORD

The Kansas Wheat Commission joins the Kansas Department of Agriculture in presenting this 2004 Wheat Quality Report. This information is of vital interest to wheat producers and processors as well as domestic and foreign buyers.

The basic quality information is compiled by summarizing data from inspection certificates for railroad car samples of Kansas wheat moving from first point of sale. In addition, truckloads converted to carlot equivalents were included. Determinations of protein percentage, test weight per bushel, and other grade factors were made by the **Kansas Grain Inspection Service, Inc.**

Eldon J. Thiessen
Director

Betty Bunck, Chairperson
Kansas Wheat Commission

2004 KANSAS WHEAT QUALITY

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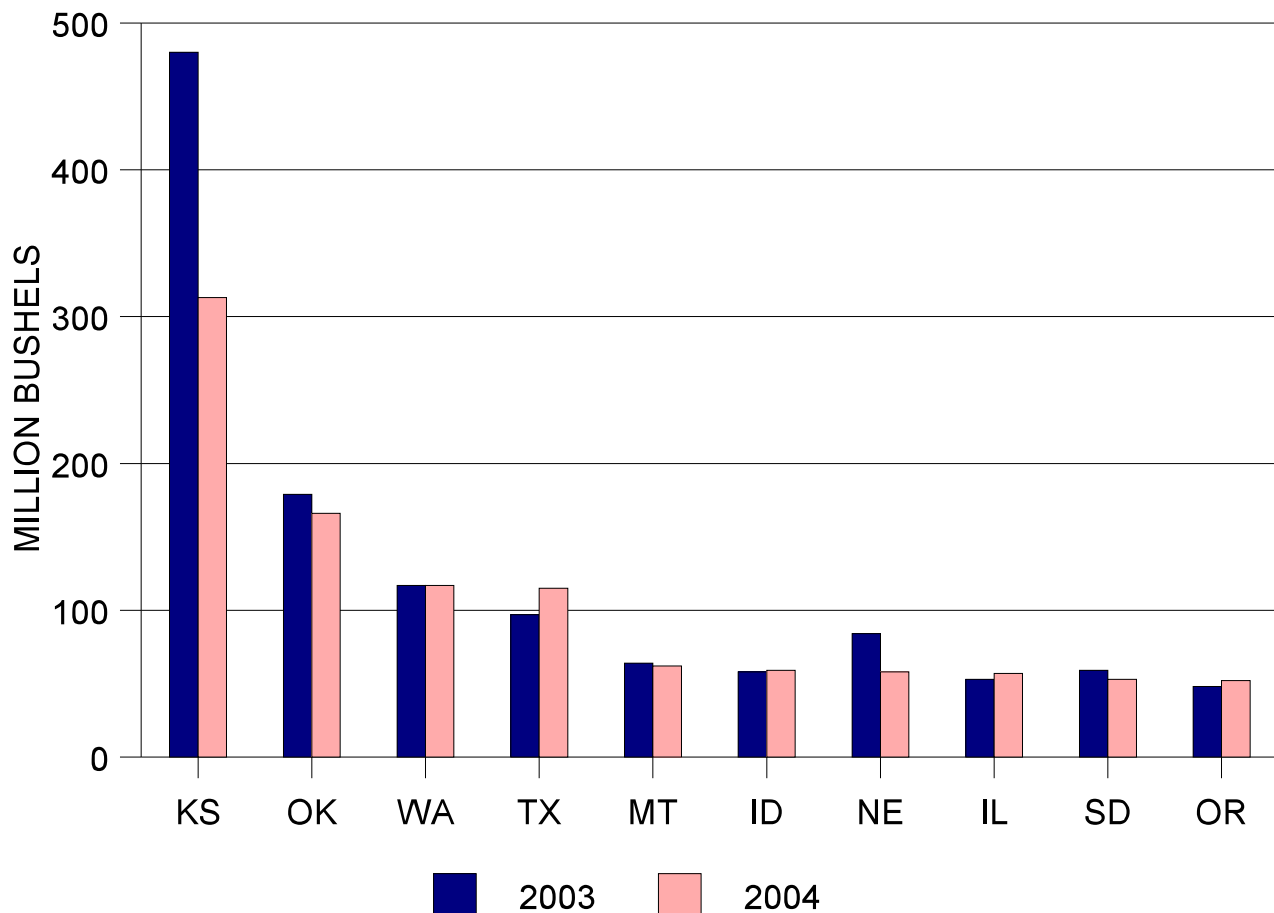
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WHEAT SITUATION

World wheat production as of August 1, 2004 is expected to total 608.6 million metric tons (22.4 billion bushels), up 11 percent from a year ago. Total U.S. wheat production, at 57.8 million metric tons, will be down 9 percent from a year ago and will account for 9 percent of the world total. Winter wheat production in the U.S. is estimated at 40.5 million metric tons, or about 70 percent of the total U.S. wheat production. Kansas, with an estimated 8.5 million metric tons of winter wheat, will account for 21 percent of the U.S. winter wheat production. This output represents 15 percent of the total U.S. wheat output and 1 percent of the world total.

WINTER WHEAT PRODUCTION

LEADING STATES - 2003 & 2004



ACRES OF WHEAT PLANTED BY SIZE GROUP

Kansas farmers with 500 or more acres of wheat planted accounted for 23.6 percent of all wheat farms and represented 66.5 percent of acres planted in the fall of 2003. The wheat acres planted totaled 9,900,000 acres.

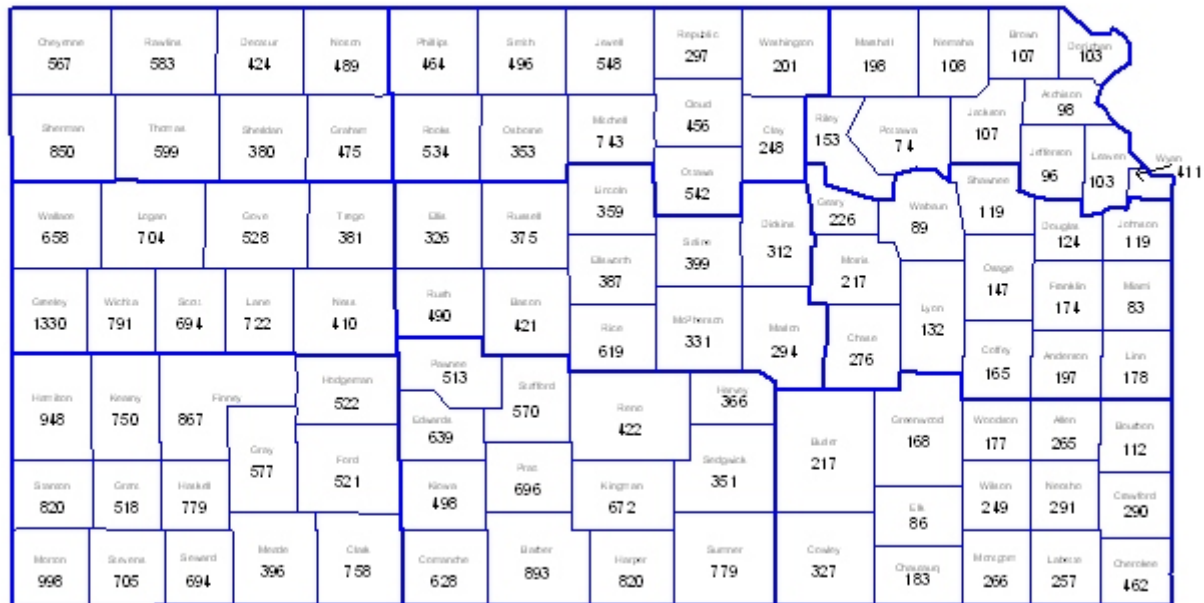
WHEAT PLANTED IN KANSAS FOR 2004 HARVEST, BY SIZE GROUPS

Acres of Wheat Planted per Farm	Number of Farms	Percent of Farms	Acres of Wheat Planted
1-24	2,300	8.1	31,900
25-74	5,300	18.8	239,600
75-199	6,600	23.7	809,100
200-499	7,200	25.8	2,232,000
500-749	2,800	10.0	1,644,600
750-999	1,400	4.9	1,151,400
1,000-1,999	2,000	7.1	2,563,400
2,000-2,999	300	1.1	710,800
3,000 +	100	0.5	517,200
State	28,000	100.0	9,900,000

AVERAGE ACRES PLANTED, BY COUNTY

Greeley County led the State with an average of 1,330 acres of wheat planted per farm, followed by Morton County with 998 acres and Hamilton County with 948 acres. Statewide, the average is 354 acres of wheat planted per farm.

ACRES OF WHEAT PLANTED PER FARM, 2004 HARVEST



U.S. WHEAT SUPPLY AND DISAPPEARANCE, 1995-2004

U.S. wheat supplies for the 2004/05 season are expected to be 2,729 million bushels, down 6 percent from last year. Beginning stocks, at 546 million bushels, are up 11 percent from a year ago. Estimated U.S. wheat production as of August 1, at 2,123 million bushels, is down 9 percent from last year. Disappearance is expected to total 2,151 million bushels, compared with 2,354 million bushels for 2003. Domestic use is expected to account for 1,201 million bushels, up 1 percent from the previous year. Exports, forecast at 950 million bushels, are 18 percent below a year ago. Carry-over at the end of the crop year is expected to total 578 million bushels, 6 percent above the 2003/04 level.

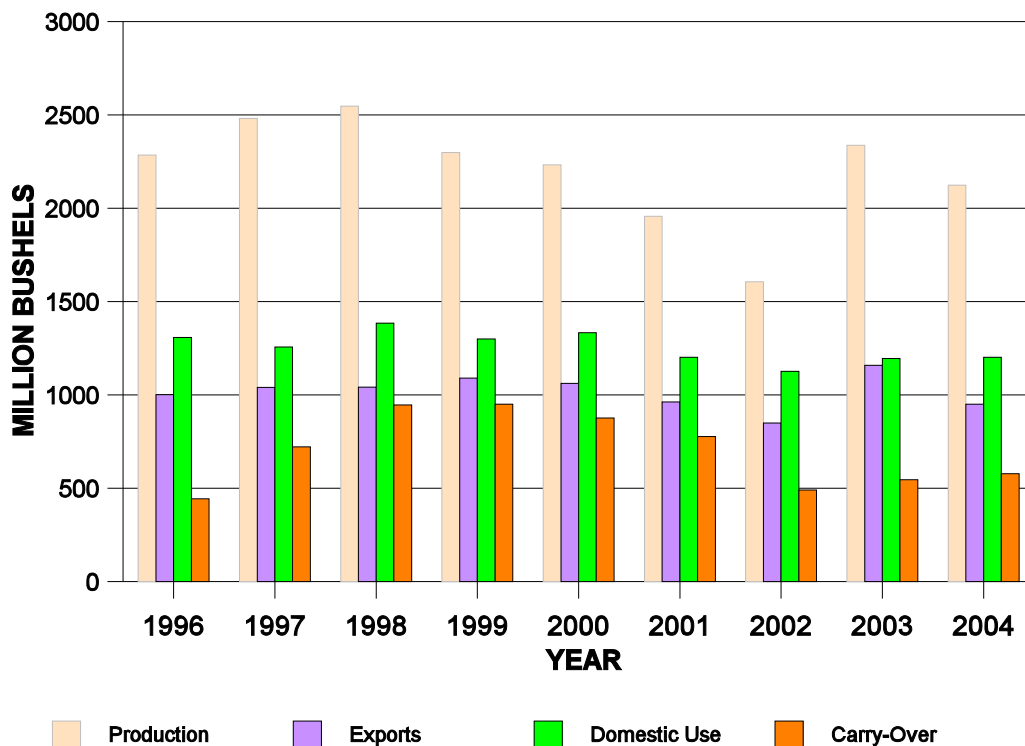
U.S. WHEAT SUPPLY AND DISAPPEARANCE, 1996-2004

Year Beginning June 1	Supply			Disappearance			Ending Stocks May 31
	Beginning Stocks	Production	Total <u>1/</u>	Domestic Use	Exports	Total <u>2/</u>	
----- Million Bushels -----							
1996/97	376	2,285	2,753	1,308	1,001	2,310	444
1997/98	444	2,481	3,020	1,257	1,040	2,298	722
1998/99	722	2,547	3,373	1,385	1,042	2,427	946
1999/00	946	2,299	3,339	1,300	1,090	2,390	950
2000/01	950	2,232	3,272	1,334	1,062	2,396	876
2001/02	876	1,957	2,941	1,201	962	2,164	777
2002/03	777	1,606	2,468	1,126	850	1,976	491
2003/04	491	2,337	2,900	1,195	1,159	2,354	546
2004/05 <u>3/</u>	546	2,123	2,729	1,201	950	2,151	578

1/ Includes imports. 2/ Totals may not add due to rounding. 3/ Preliminary.

U.S. WHEAT SUPPLY & DISAPPEARANCE

1996-2004



KANSAS WHEAT STOCKS

Marketing Year	September 1	December 1	March 1	June 1
----- Thousand Bushels -----				
1998/99	379,253	271,381	226,800	148,561
1999/00	394,409	282,868	230,645	168,899
2000/01	384,526	274,900	217,771	156,190
2001/02	377,309	268,240	203,216	121,625
2002/03	267,995	187,292	129,811	53,597
2003/04	373,836	274,458	167,613	76,660

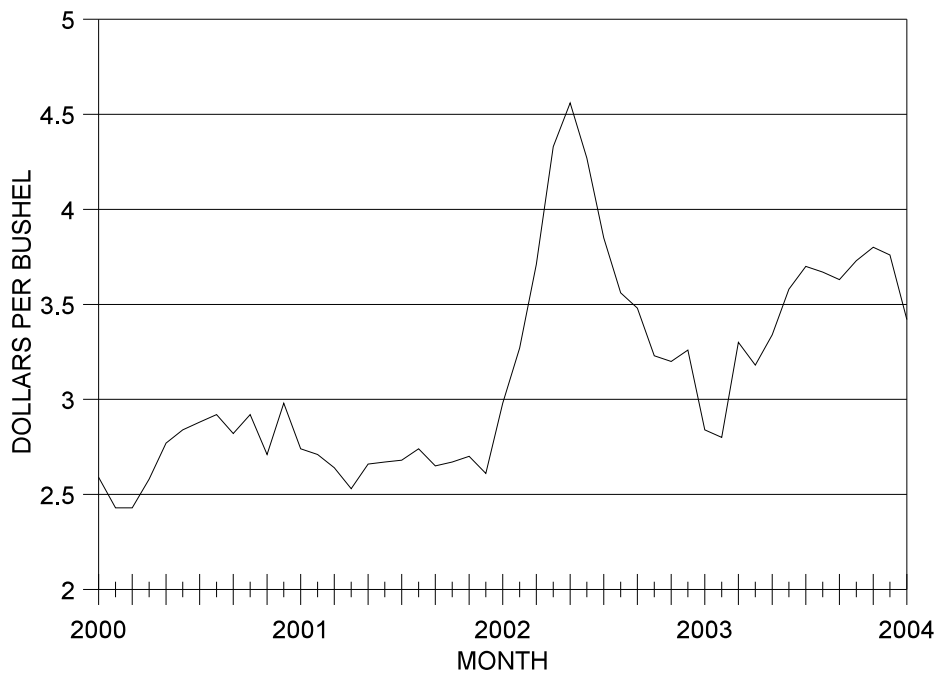
MONTHLY MARKETINGS OF KANSAS WHEAT, 1998-2003

Month	1998-99	1999-2000	2000-01	2001-02	2002-03	5-Year Average ^{1/}
----- Percent -----						
June	13	6	16	13	28	15
July	23	37	19	26	28	27
August	10	11	15	7	12	11
September	9	7	6	3	6	6
October	8	2	8	7	4	6
November	4	3	4	4	3	4
December	7	6	5	10	3	6
January	6	10	10	9	3	8
February	3	7	3	7	3	5
March	8	4	3	4	2	4
April	4	3	8	6	3	5
May	5	4	3	4	5	4

^{1/} May not add due to rounding.

KANSAS WHEAT PRICES

JUNE 2000-JUNE 2004



HIGHLIGHTS OF THE 2004 CROP

The 2004 Kansas wheat crop, as of August 1, 2004 was estimated at 313.2 million bushels, down 35 percent from last year. Wheat was planted on 9.9 million acres for the 2004 crop, down 5 percent from 2003. The acres harvested for grain totaled 8.7 million acres, down 1.3 million acres from last year.

Seeding of wheat acres began the first week of September. Forty-five percent was seeded and 17 percent was emerged by the 28th of September, ahead of the 5-year averages of 35 percent and 13 percent, respectively. Planting in the western third of the State was nearly completed by mid-October due to dry weather. Statewide, wheat seeding was 96 percent complete and emergence was at 84 percent by the second of November. Wheat condition was above 50 percent good to excellent all fall until dropping slightly by the end of November to 47 percent good to excellent. Ninety-five percent of the crop was emerged by the first of December.

Wheat condition declined over the winter due to dry conditions. On March 7, 34 percent of the crop was rated as poor to very poor. By the end of March, estimates indicated that 7 percent of the crop either had not emerged or was lost to winterkill. On April 25th, 30 percent of the crop was judged to be in poor to very poor condition compared to 16 percent last year. Crop progress was ahead of normal during the spring with 84 percent jointed on April 25th, compared with 80 percent last year and 75 percent for the 5-year average. The crop began to head by late April and progressed ahead of normal during May. Damage from freezes in early spring became evident as the crop matured during May.

Harvest of the 2004 crop began well ahead of normal. By June 13th the crop was 15 percent harvested, compared to 1 percent last year and 6 percent for the 5-year average. Harvest continued ahead of average throughout June despite some scattered showers. Heavy rains in July slowed harvest and led to wheat sprout in the northern third of the State. Harvest was 99 percent complete by the 18th of July. Protein content for the 2004 crop averaged 12.8 percent with test weight at 59.7 pounds per bushel and moisture at 11.6 percent.

DOMESTIC UNITS

Year	Planted Acres	Harvested Acres	Yield per Acre	Production	Test Weight	Protein ^{1/}	Moisture
	----- 1,000 -----		Bushels	1,000 Bu.	Lb./Bu.	--- Percent ---	
1995	11,700	11,000	26.0	286,000	58.4	12.3	11.1
1996	11,800	8,800	29.0	255,200	60.2	13.3	12.3
1997	11,400	10,900	46.0	501,400	60.6	11.8	11.9
1998	10,700	10,100	49.0	494,900	61.5	11.5	11.2
1999	10,000	9,200	47.0	432,400	60.2	11.5	12.2
2000	9,800	9,400	37.0	347,800	59.9	11.9	11.8
2001	9,800	8,200	40.0	328,000	60.9	12.1	11.8
2002	9,700	8,200	33.0	270,600	60.0	13.1	11.2
2003	10,400	10,000	48.0	480,000	60.7	11.7	11.5
2004	9,900	8,700	36.0	313,200	59.7	12.8	11.6

^{1/} All protein data shown have been converted to a 12% moisture basis.

METRIC UNITS

Year	Planted Hectares	Harvested Hectares	Yield per Hectare	Production	Test Weight ^{1/}
	----- 1,000 -----		Metric Tons	1,000 MT	Kg/Hl
1995	4,735	4,452	1.7	7,784	75.2
1996	4,775	3,561	2.0	6,945	77.6
1997	4,614	4,411	3.1	13,646	78.1
1998	4,330	4,087	3.3	13,469	79.2
1999	4,047	3,723	3.2	11,768	77.6
2000	3,966	3,804	2.5	9,466	77.2
2001	3,966	3,318	2.7	8,927	78.5
2002	3,926	3,318	2.2	7,365	77.3
2003	4,209	4,047	3.2	13,063	78.2
2004	4,006	3,521	2.4	8,524	76.9

^{1/} Kilograms/hectoliter = 1.28841 X (lbs./bu.), 1 hectoliter = 2.8378 bushel.

WHEAT QUALITY DATA - KANSAS GRAIN INSPECTION CERTIFICATES

IMPORTANCE OF WHEAT QUALITY

The quality of wheat as characterized by protein content, weight per bushel, amount of dockage, grades and grade defects has an important impact on the use of wheat for flour and, hence, its price in the market place.

This report on wheat quality, issued by Kansas Agricultural Statistics Service, helps farmers appraise the quality of the wheat crop being marketed and aids buyers in locating wheat with the desired characteristics.

Information on wheat protein content, weight per bushel, varieties, and grade defects helps producers of high quality grain obtain better prices. The grain trade, in turn, is in a better position to know the areas in which the quality of wheat meets their requirements and direct their purchases accordingly. Thus, the reports facilitate pricing and marketing of the crop. Publication of wheat quality data by counties and agricultural statistics districts as soon as the new crop comes on the market provides everyone with current information coinciding with the harvest period, thus maximizing benefits to producers, grain buyers, and the wheat industry in general.

The following table shows the grading standards used by the Kansas Grain Inspection Service, Inc. in grading samples of hard red winter wheat. This bulletin is based on a summary of samples graded by the Kansas Grain Inspection Service, Inc.

GRADES AND GRADE REQUIREMENTS FOR HARD RED WINTER WHEAT

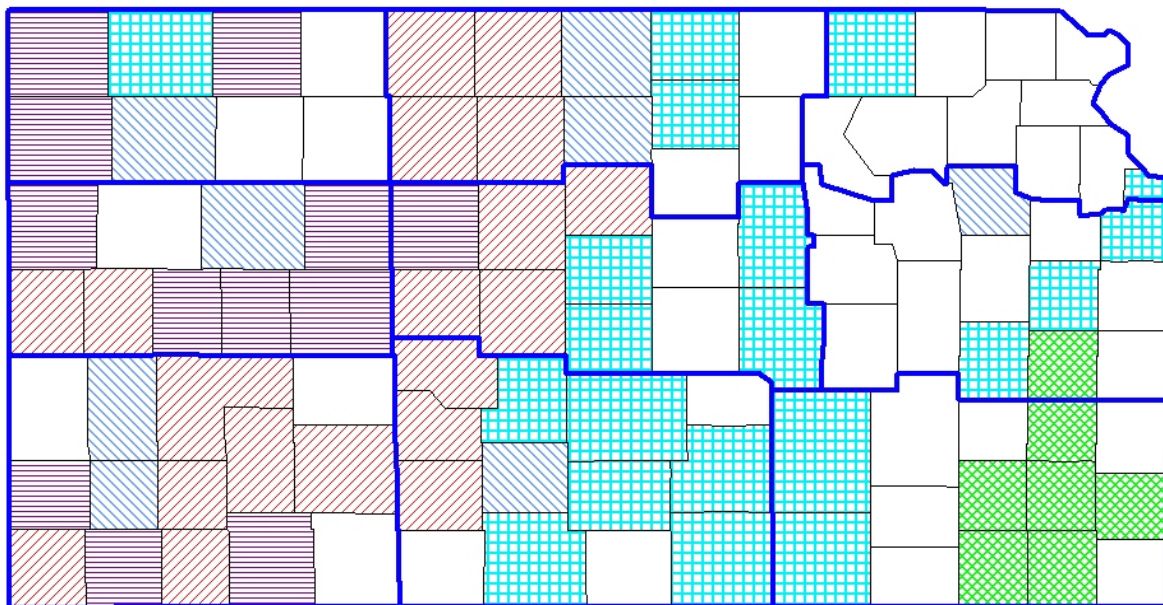
Grade	Minimum Weight per Bushel	Maximum Limits:						
		Defects					Wheat of Other Classes	
		Heat Damaged Kernels	Damaged Kernels (Total)	Foreign Material	Shrunken and Broken Kernels	Total Defects	Con- trasting Classes	Wheat of Other Classes (Total)
	Pounds	----- Percent -----						
1	60.0	0.2	2.0	0.4	3.0	3.0	1.0	3.0
2	58.0	0.2	4.0	0.7	5.0	5.0	2.0	5.0
3	56.0	0.5	7.0	1.3	8.0	8.0	3.0	10.0
4	54.0	1.0	10.0	3.0	12.0	12.0	10.0	10.0
5	51.0	3.0	15.0	5.0	20.0	20.0	10.0	10.0

SAMPLE GRADE: Sample grade is wheat that does not meet the requirements for the grades U.S. Nos. 1, 2, 3, 4, or 5; or contains 31 or more insect-damaged kernels per 100 grams of wheat; or contains 4 or more stones or any number of stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 1 or more pieces of glass, 2 or more crotalaria seeds, 1 or more castor beans, 3 or more particles of an unknown foreign substance or a commonly recognized harmful toxic substance, 1 or more rodent pellets, bird droppings, or equivalent quantity of other animal filth per 1,000 grams of wheat; or has a musty, sour, or commercially objectionable foreign odor except smut or garlic odor; or is heating or otherwise of distinctly low quality.


PROTEIN CONTENT

The average protein content of the 2004 Kansas wheat crop was 12.8 percent, up from last year's 11.7. This year's protein is also up from the 10-year average of 12.1 percent. By district, protein content ranged from 11.1 percent in the east central and southeast districts to 13.9 percent in the west central district. Decatur led all counties, averaging 14.8 percent protein. Second highest was Wallace County, averaging 14.7 percent protein. See the map below for average protein content by county.

2004 Kansas Wheat Crop - Protein
(Percent)



Protein

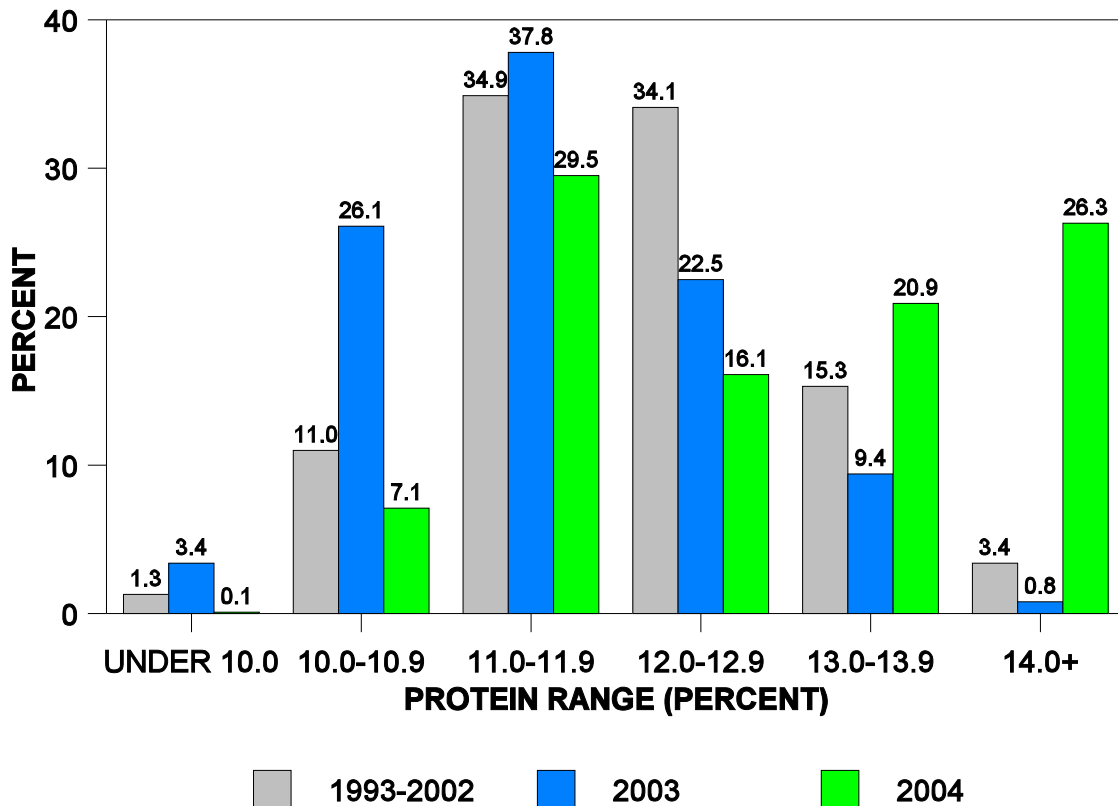
-  14 to 14.9
-  13 to 13.9
-  12 to 12.9
-  11 to 11.9
-  9 to 10.9
-  No Data

PROTEIN RANGES OF 2004 KANSAS WHEAT 1/

Protein Range	District Production (000 bu.)									
	NW	WC	SW	NC	C	SC	NE	EC	SE	State
	8,900	18,900	45,900	46,100	66,200	82,200	10,500	11,700	22,800	313,200
(Percent)	----- Percent -----									
Under 10.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.9	0.1
10.0-10.9	0.9	0.1	0.1	1.5	3.4	3.9	5.7	3.8	64.5	7.1
11.0-11.9	1.1	2.2	0.7	60.5	34.6	30.5	53.0	35.3	26.8	29.5
12.0-12.9	25.8	11.0	4.1	19.7	27.0	15.3	19.5	7.0	7.7	16.1
13.0-13.9	8.7	19.8	51.3	10.6	17.4	23.1	7.4	10.5	0.1	20.9
14.0-Over	63.5	66.9	43.8	7.5	17.6	27.2	14.0	43.4	0.0	26.3
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Protein content adjusted to 12 percent moisture basis.

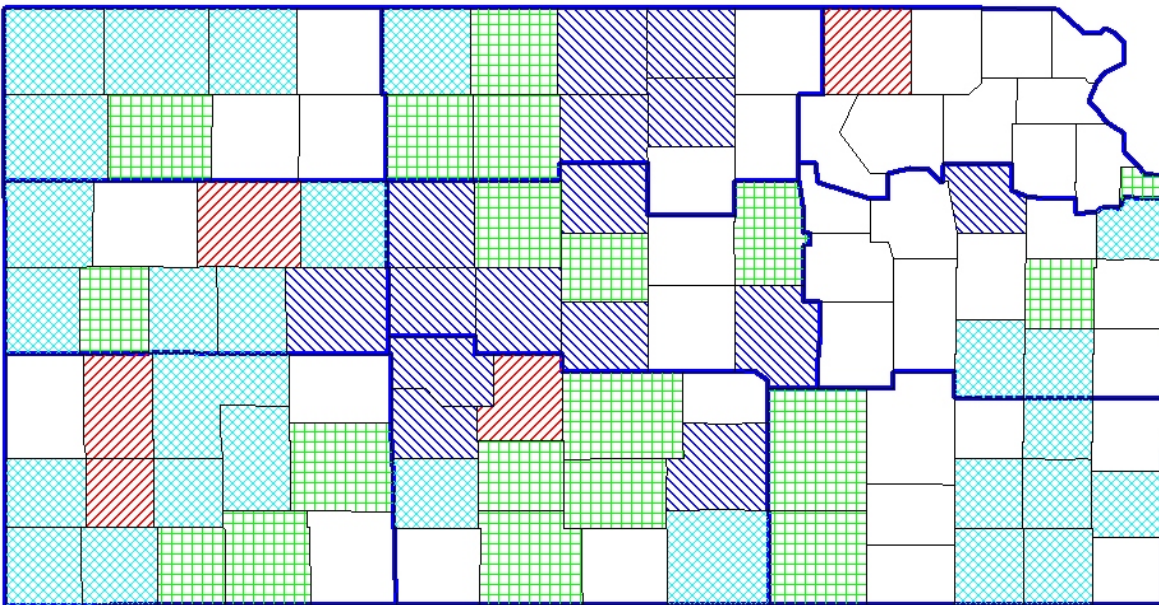
**PROTEIN RANGES OF KANSAS WHEAT
1993-2002, 2003, & 2004**








TEST WEIGHT

The 2004 Kansas wheat crop averaged 59.7 pounds per bushel, compared with 60.7 pounds for the 2003 crop. The 10-year average for Kansas is 60.2 pounds per bushel. By district, test weights fell in a range from 58.8 pounds in the southeast to 62.2 pounds in the northeast district. The central district was second highest in test weight at 60.7 pounds. Grant County, with a test weight of 63.1 pounds, was the highest in the State. Kearny County followed at 62.8 pounds. See the map below for average weight per bushel by county.

2004 Kansas Wheat Crop - Test Weight
(Pounds per Bushel)



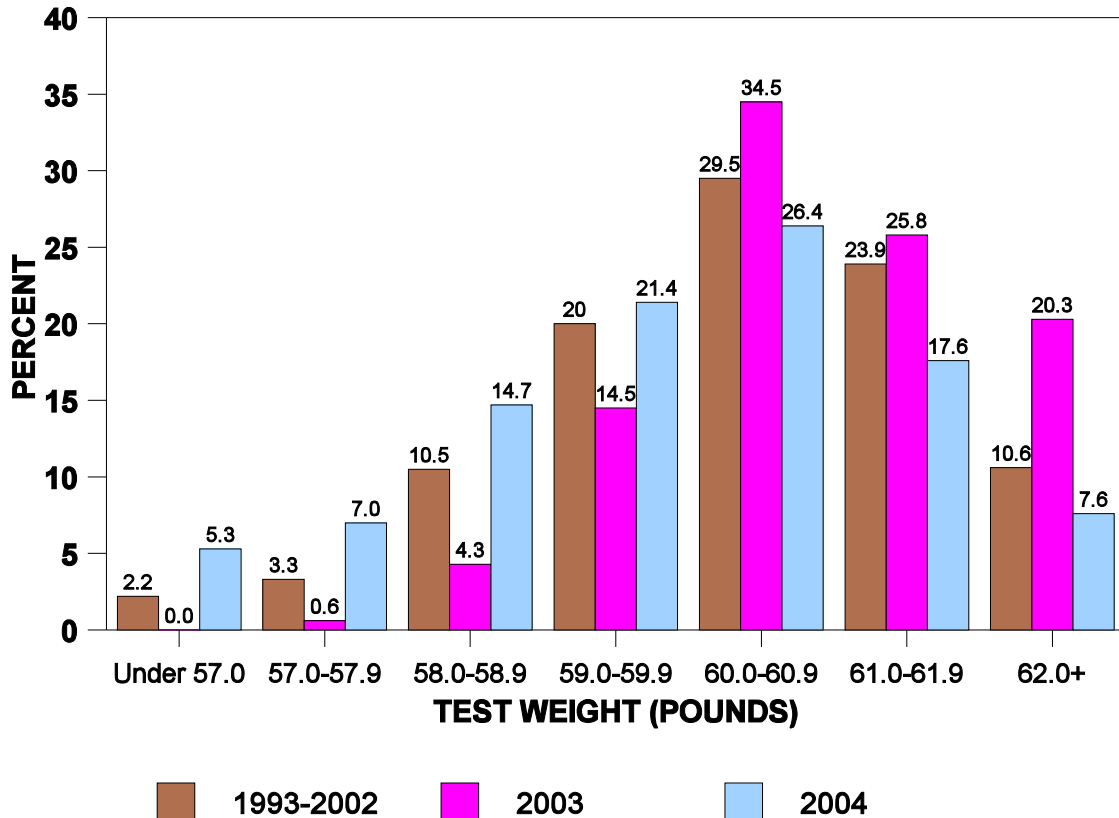
Test Weight

-  61.5 to 63.4
-  60.5 to 61.4
-  59.5 to 60.4
-  56.2 to 59.4
-  No Data

RANGES OF 2004 TEST WEIGHTS

Pounds per Bushel	District Production (000 bu.)									
	NW	WC	SW	NC	C	SC	NE	EC	SE	State
	8,900	18,900	45,900	46,100	66,200	82,200	10,500	11,700	22,800	313,200
	----- Percent -----									
Under 55.0	4.3	11.1	3.3	0.4	0.0	0.0	1.4	0.2	0.0	1.4
55.0-55.9	2.3	9.1	3.1	0.4	0.1	0.1	2.1	0.1	0.6	1.3
56.0-56.9	9.3	14.2	6.0	1.4	0.2	0.5	1.9	0.1	2.2	2.6
57.0-57.9	21.4	18.6	15.6	1.7	1.1	4.1	3.9	0.6	18.0	7.0
58.0-58.9	23.8	20.1	17.8	2.0	3.9	17.9	7.8	5.1	53.4	14.7
59.0-59.9	7.8	11.2	30.3	9.9	17.3	29.2	30.2	20.1	20.3	21.4
60.0-60.9	29.9	3.9	19.7	40.3	37.9	25.7	16.0	22.7	5.5	26.4
61.0-61.9	1.2	8.2	3.1	35.5	25.7	15.5	16.3	36.3	0.0	17.6
62.0-Over	0.0	3.6	1.1	8.4	13.8	7.0	20.4	14.8	0.0	7.6
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TEST WEIGHT RANGES OF KANSAS WHEAT 1993-2002, 2003, & 2004



WEIGHT, PROTEIN, AND MOISTURE

County and District	Samples Tested 2004 ^{1/}	Test Weight			Protein Content ^{2/}			Moisture		
		Average 1993-02	2003	2004	Average 1993-02	2003	2004	Average 1993-02	2003	2004
Cheyenne	43	59.8	59.9	58.7	12.7	13.8	14.3	11.2	10.8	11.2
Decatur	28	59.6	59.2	58.0	12.4	12.0	14.8	11.6	10.8	11.9
Graham	-	59.4	-	-	11.3	-	-	11.9	-	-
Norton	-	59.9	59.1	-	12.2	11.4	-	11.5	10.6	-
Rawlins	-	59.7	59.5	-	12.4	12.0	-	11.2	10.8	-
Sheridan	-	57.3	59.1	-	11.8	12.7	-	11.4	11.2	-
Sherman	92	59.8	59.6	58.2	12.5	13.4	14.3	11.4	9.7	11.1
Thomas	94	59.9	60.1	60.3	12.5	12.4	12.7	11.3	10.7	10.5
Northwest	259	59.8	59.6	59.0	12.5	12.6	13.3	11.3	10.6	11.1
Gove	42	59.9	61.5	61.6	12.3	11.7	12.8	11.4	11.0	11.3
Greeley	54	60.7	61.1	56.2	11.6	11.6	13.7	10.7	10.7	11.8
Lane	13	60.1	60.5	57.5	12.0	12.3	14.3	11.3	11.0	12.1
Logan	-	60.6	61.4	-	11.9	10.2	-	11.2	10.4	-
Ness	20	59.9	59.9	60.6	11.9	12.0	14.5	12.0	11.2	10.8
Scott	79	60.2	60.0	59.1	12.3	12.4	14.1	11.4	10.6	10.7
Trego	97	60.5	60.4	58.9	12.0	11.6	14.2	11.7	11.0	11.2
Wallace	90	60.4	60.8	57.1	12.1	12.3	14.7	11.5	10.4	11.8
Wichita	38	60.9	59.9	60.1	11.8	12.3	13.2	11.3	10.7	10.9
West Central	433	60.4	60.6	58.9	12.0	11.8	13.9	11.4	10.8	11.3
Clark	-	60.0	-	-	12.3	-	-	11.9	-	-
Finney	350	60.3	60.1	57.3	12.5	12.3	13.9	11.3	10.9	11.6
Ford	565	60.3	60.7	60.0	12.5	12.8	13.9	11.8	12.1	11.2
Grant	-	60.5	59.5	-	12.8	13.1	-	11.0	10.8	-
Gray	223	60.4	60.3	59.0	12.7	13.0	13.8	11.4	11.2	11.3
Hamilton	-	60.3	61.6	-	12.1	11.6	-	10.9	11.6	-
Haskell	77	60.0	61.1	57.9	12.5	12.9	13.9	11.2	11.8	11.5
Hodgeman	-	59.7	-	-	12.3	-	-	12.3	-	-
Kearny	6	61.0	-	62.8	12.0	-	12.6	10.6	-	10.9
Meade	243	60.5	60.6	59.7	12.8	13.5	14.2	11.9	11.8	11.2
Morton	240	60.3	59.6	59.2	12.7	12.2	13.7	10.3	11.4	10.2
Seward	60	60.6	60.1	59.7	12.8	13.6	14.0	11.1	11.6	11.1
Stanton	231	60.1	59.7	58.4	12.6	12.5	14.0	10.4	10.8	10.5
Stevens	85	60.5	60.4	58.6	12.8	12.8	14.4	10.7	11.6	10.6
Southwest	2081	60.3	60.4	59.5	12.6	12.7	13.8	11.2	11.4	11.1
Clay	-	60.4	-	-	11.3	-	-	11.9	-	-
Cloud	1338	59.9	61.5	61.1	11.7	10.9	11.5	11.9	11.7	13.0
Jewell	28	60.3	62.2	61.0	12.0	11.1	12.4	12.0	11.4	12.4
Mitchell	301	60.4	61.7	60.9	12.1	11.2	12.6	11.9	11.9	12.4
Osborne	96	60.0	61.2	60.2	12.4	11.5	13.5	11.7	11.4	11.8
Ottawa	-	60.9	-	-	11.8	-	-	11.7	-	-
Phillips	11	59.9	60.1	58.4	12.2	11.2	13.7	11.5	10.8	11.5
Republic	196	59.9	61.1	60.5	12.1	11.1	11.8	11.8	11.3	12.5
Rooks	40	59.5	-	59.5	12.2	-	13.8	11.6	-	12.0
Smith	73	60.1	61.9	60.0	12.3	11.8	13.7	11.6	11.4	12.1
Washington	-	59.8	-	-	11.7	-	-	12.4	-	-
North Central	2083	60.1	61.5	60.2	12.1	11.3	12.9	11.8	11.4	12.2
Barton	447	60.5	61.2	61.0	12.5	11.1	13.1	12.0	11.7	11.7
Dickinson	96	60.1	61.7	60.4	11.3	10.6	11.2	12.5	12.6	12.2
Ellis	111	60.4	60.7	60.5	11.9	11.3	14.1	11.8	11.1	11.2
Ellsworth	87	60.6	61.8	60.4	11.9	11.0	12.0	12.1	11.7	12.1
Lincoln	3	60.2	62.2	60.6	11.9	10.6	13.6	11.7	11.9	12.4
McPherson	-	60.0	-	-	12.0	-	-	12.1	-	-
Marion	238	60.1	61.5	60.5	11.4	10.3	11.2	12.3	12.7	12.5
Rice	423	60.5	61.8	61.2	12.3	11.2	11.9	12.2	11.9	12.1
Rush	221	60.3	60.4	60.8	12.0	11.5	14.0	11.8	11.1	11.2
Russell	133	60.4	61.3	60.2	12.2	10.9	13.4	12.0	11.6	11.9
Saline	-	60.3	-	-	11.9	-	-	11.7	-	-
Central	1759	60.4	61.4	60.7	12.0	10.9	12.6	12.0	11.8	11.9

WEIGHT, PROTEIN, AND MOISTURE

County and District	Samples Tested 2004 ^{1/}	Test Weight			Protein Content ^{2/}			Moisture		
		Average 1993-02	2003	2004	Average 1993-02	2003	2004	Average 1993-02	2003	2004
Barber	91	60.1	62.3	59.8	11.8	10.9	11.4	11.8	11.9	11.6
Comanche	-	59.9	-	-	12.4	-	-	12.1	-	-
Edwards	20	60.7	61.3	61.3	12.5	12.4	13.9	12.1	11.7	11.8
Harper	-	59.4	61.6	-	11.8	10.6	-	11.9	12.1	-
Harvey	-	60.2	-	-	11.7	-	-	12.3	-	-
Kingman	237	60.7	62.4	60.0	11.5	10.5	11.1	12.0	11.9	11.5
Kiowa	75	60.2	61.7	59.5	12.5	11.9	13.7	12.3	13.1	11.8
Pawnee	574	60.1	60.6	61.1	12.6	12.2	13.9	11.9	11.6	11.4
Pratt	343	60.1	61.5	59.6	12.5	11.5	12.3	12.0	11.9	11.7
Reno	82	60.5	60.3	59.9	12.3	11.6	11.6	11.7	11.8	12.0
Sedgwick	63	60.5	60.9	60.6	11.7	11.1	11.3	11.9	12.3	11.8
Stafford	28	60.8	-	62.5	12.8	-	11.9	11.8	-	12.1
Sumner	348	59.5	59.0	58.1	11.8	11.3	11.4	12.0	12.5	11.7
South Central	1861	60.3	60.9	59.9	12.0	11.3	12.0	12.0	12.1	11.7
Atchison	-	59.6	-	-	11.6	-	-	12.4	-	-
Brown	-	60.1	-	-	11.4	-	-	12.9	-	-
Doniphan	-	-	-	-	-	-	-	-	-	-
Jackson	-	-	-	-	-	-	-	-	-	-
Jefferson	-	-	-	-	-	-	-	-	-	-
Leavenworth	-	-	-	-	-	-	-	-	-	-
Marshall	125	60.3	62.6	62.2	11.4	10.9	11.9	12.5	11.7	12.4
Nemaha	-	59.4	-	-	11.5	-	-	12.9	-	-
Pottawatomie	-	-	-	-	-	-	-	-	-	-
Riley	-	-	-	-	-	-	-	-	-	-
Wyandotte	328	59.7	61.7	59.6	11.0	12.9	11.7	12.6	10.2	12.6
Northeast	453	60.2	62.6	62.2	11.4	10.9	11.9	12.6	11.7	12.4
Anderson	3	-	-	58.6	-	-	10.8	-	-	11.4
Chase	-	60.3	-	-	11.6	-	-	11.1	-	-
Coffey	6	60.1	-	58.6	10.7	-	11.0	12.4	-	12.9
Douglas	-	58.1	-	-	11.6	-	-	13.9	-	-
Franklin	54	60.3	60.6	59.5	11.0	10.3	11.2	12.0	12.4	12.2
Geary	-	-	-	-	-	-	-	-	-	-
Johnson	51	61.1	60.9	59.3	11.8	10.0	11.5	11.1	12.7	12.4
Linn	-	59.3	62.3	-	10.9	9.9	-	12.4	13.3	-
Lyon	-	-	-	-	-	-	-	-	-	-
Miami	-	-	-	-	-	-	-	-	-	-
Morris	-	61.1	-	-	10.9	-	-	12.4	-	-
Osage	-	60.4	-	-	11.5	-	-	13.0	-	-
Shawnee	4	60.4	60.0	61.4	11.6	12.3	12.8	12.5	10.3	11.2
Wabaunsee	-	-	-	-	-	-	-	-	-	-
East Central	118	60.2	61.1	59.0	11.3	10.3	11.1	12.3	12.5	12.1
Allen	83	59.6	60.4	58.0	10.5	9.9	10.8	12.6	13.2	12.7
Bourbon	-	-	-	-	-	-	-	-	-	-
Butler	-	58.9	-	-	11.5	-	-	12.6	-	-
Chautauqua	-	-	-	-	-	-	-	-	-	-
Cherokee	-	59.9	-	-	10.7	-	-	13.1	-	-
Cowley	124	59.6	59.2	59.6	11.3	10.8	12.0	12.2	12.6	12.1
Crawford	33	59.8	61.0	58.4	11.0	9.9	10.8	12.9	13.0	13.3
Elk	-	-	-	-	-	-	-	-	-	-
Greenwood	-	-	-	-	-	-	-	-	-	-
Labette	93	60.5	60.6	58.2	10.3	10.2	10.8	12.6	13.1	13.1
Montgomery	90	59.2	60.5	58.5	10.8	10.0	10.6	13.0	12.9	13.1
Neosho	279	59.4	60.4	58.4	11.1	10.1	10.7	12.9	13.0	12.8
Wilson	77	59.4	60.2	58.1	11.3	10.5	10.8	12.7	12.6	12.9
Woodson	-	-	-	-	-	-	-	-	-	-
Southeast	780	59.4	60.1	58.8	11.1	10.3	11.1	12.7	12.8	12.7
State	9827	60.2	60.7	59.7	12.1	11.7	12.8	11.7	11.5	11.6

1/Samples tested represent data from inspection certificates of railroad cars (truckloads are converted to carlot equivalents). Summarized data include old crop and new crop wheat moving from first point of sale and inspected by the Kansas Grain Inspection Service, Inc. 2/ Adjusted to 12 percent moisture. - Not published due to insufficient data or no samples taken, but included in district and State totals.

GRADES, DOCKAGE AND GRADE DEFECTS

Eighty-seven percent of the 2004 wheat carlots sampled averaged number 2 or better, compared with 97 percent for 2003. Wheat grading number 1, at 51 percent, was down 22 points from the 73 percent for 2003. Samples grading number 2, at 36 percent, were up 12 points from 24 percent for 2003. The northeast district of the State again had the highest average, with 99 percent of the samples grading number 1. The north central district was second with 88 percent of the samples grading number 1. The east central had the lowest average grading number 1, with 4 percent. Ninety-eight percent of all samples had less than 0.9 percent dockage, compared with 93 percent in 2003. Total defects, at 2.1 percent, were up from the 1.6 percent in 2003.

PERCENTAGE OF KANSAS WHEAT IN EACH GRADE

Year	District									State
	NW	WC	SW	NC	C	SC	NE	EC	SE	
Grade No. 1										
1995	64	28	2	23	3	5	1	48	1	16
1996	48	73	64	63	60	49	19	40	36	55
1997	71	80	46	90	90	63	92	77	63	72
1998	90	92	90	81	91	88	73	80	42	88
1999	58	73	74	51	63	46	17	39	1	61
2000	5	34	25	42	88	57	88	99	41	39
2001	26	80	87	71	78	70	100	10	68	67
2002	41	31	40	94	35	32	100	84	30	48
2003	56	71	75	91	77	65	100	80	60	73
2004	44	19	24	88	79	37	99	4	10	51
Grade No. 2										
1995	33	61	37	55	50	34	43	34	23	43
1996	38	20	32	30	38	46	45	60	51	38
1997	20	15	47	7	8	29	8	13	29	23
1998	9	7	9	18	8	9	27	20	52	11
1999	35	26	25	38	34	47	78	60	54	34
2000	49	63	71	51	12	39	12	1	50	52
2001	68	19	12	26	21	26	0	89	31	31
2002	57	66	57	6	53	64	0	16	68	48
2003	42	28	25	8	22	27	0	20	37	24
2004	29	43	49	11	20	50	1	93	72	36
All Other Grades										
1995	3	11	61	22	47	61	56	18	76	41
1996	14	7	4	7	2	5	36	0	13	7
1997	9	5	7	3	2	8	0	10	8	5
1998	1	1	1	1	1	3	0	0	6	1
1999	7	1	1	11	3	7	5	1	45	5
2000	46	3	4	7	0	4	0	0	9	9
2001	6	1	1	3	1	4	0	1	1	2
2002	2	3	3	0	12	4	0	0	2	4
2003	2	1	0	1	1	8	0	0	3	3
2004	27	38	27	1	1	13	0	3	18	13

KANSAS WHEAT DOCKAGE PERCENTAGES

Year	Number of Cars Sampled 1/	Percent of Samples with Dockage				Average Dockage of Samples	
		Zero Percent	0.1-0.4 Percent	0.5-0.9 Percent	Over 0.9 Percent	Over 0.9%	All
1995	9,879	0	14	59	27	1.7	0.9
1996	14,735	0	20	47	33	2.0	1.1
1997	19,601	0	51	39	10	4.1	0.8
1998	18,190	1	36	56	7	1.3	0.6
1999	12,735	0	47	43	10	1.4	0.6
2000	16,302	0	28	61	11	1.3	0.6
2001	10,470	0	19	51	30	1.4	0.8
2002	9,481	0	50	44	6	1.2	0.5
2003	16,509	0	44	49	7	1.6	0.6
2004	9,827	0	58	40	2	1.3	0.5

1/ Includes truckloads converted to carlot equivalents.

GRADE DEFECT PERCENTAGES OF KANSAS WHEAT

Year	District									State
	NW	WC	SW	NC	C	SC	NE	EC	SE	
Damaged Kernels										
1995	0.1	0.2	0.3	0.7	0.4	0.3	2.6	0.5	0.8	0.4
1996	0.2	0.2	0.5	0.3	0.3	0.2	1.8	0.5	0.3	0.3
1997	0.1	0.2	0.2	0.0	0.1	0.2	0.2	0.3	0.1	0.1
1998	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.7	0.9	0.2
1999	0.1	0.1	0.3	0.3	0.7	0.6	0.8	0.9	1.8	0.4
2000	0.1	0.1	0.2	0.2	0.2	0.3	0.1	1.3	0.9	0.2
2001	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.4	0.1	0.1
2002	0.1	0.1	0.2	0.2	0.2	0.4	0.1	0.8	0.4	0.2
2003	0.1	0.3	0.3	0.2	0.4	0.3	0.2	0.9	0.7	0.3
2004	1.0	1.1	0.9	0.3	0.5	0.5	0.6	1.2	1.2	0.7
Foreign Material										
1995	0.0	0.0	0.1	0.2	0.2	0.3	0.1	0.1	0.2	0.2
1996	0.0	0.0	0.1	0.3	0.2	0.2	0.1	0.1	0.2	0.2
1997	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
1998	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1
1999	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.1
2000	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.2	0.1	0.1
2001	0.0	0.1	0.0	0.3	0.2	0.2	0.0	0.1	0.1	0.1
2002	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.1	0.1	0.1
2003	0.0	0.0	0.0	0.1	0.1	0.3	0.0	0.1	0.2	0.1
2004	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1
Shrunken and Broken Kernels										
1995	2.4	2.9	2.8	2.4	2.6	2.9	2.0	2.3	2.9	2.7
1996	1.7	1.7	1.4	1.5	1.4	1.9	1.2	1.4	1.2	1.6
1997	1.3	1.5	1.5	0.9	1.0	1.3	0.9	0.9	1.1	1.2
1998	1.4	1.7	1.9	1.3	1.4	1.6	0.8	1.0	1.2	1.5
1999	1.6	1.2	1.2	0.9	0.8	1.1	0.9	1.1	1.1	1.1
2000	2.0	2.1	2.2	1.5	1.5	1.5	1.0	1.1	0.8	1.8
2001	2.0	2.1	1.5	1.3	1.6	1.7	1.0	1.0	1.0	1.6
2002	1.9	1.8	1.7	1.0	1.2	1.2	0.8	1.1	1.0	1.4
2003	1.3	1.3	1.1	1.2	1.1	1.2	0.7	0.6	1.2	1.2
2004	1.5	1.6	1.4	0.9	1.1	1.5	0.6	0.8	1.1	1.3
Total Defects 1/										
1995	2.5	3.1	3.2	3.3	3.2	3.5	4.7	2.9	3.9	3.3
1996	1.9	1.9	2.0	2.1	1.9	2.3	3.1	2.0	1.7	2.1
1997	1.4	1.8	1.8	1.0	1.2	1.6	1.1	1.3	1.3	1.4
1998	1.6	2.0	2.1	1.6	1.6	1.8	1.1	1.8	2.2	1.8
1999	1.7	1.3	1.5	1.3	1.7	1.8	1.8	2.1	3.0	1.6
2000	2.2	2.3	2.5	1.8	1.8	1.9	1.1	2.5	1.8	2.1
2001	2.1	2.2	1.7	1.8	1.9	2.2	1.2	1.5	1.2	1.9
2002	2.0	2.0	2.0	1.3	1.5	1.7	0.9	1.9	1.5	1.7
2003	1.5	1.6	1.4	1.4	1.6	1.8	0.9	1.6	2.0	1.6
2004	2.5	2.7	2.4	1.3	1.6	2.2	1.2	2.1	2.3	2.1

1/ Percentages by defect type may not add to total defects due to rounding.

WHEAT GRADES AND DOCKAGE - 2004 CROP

County and District	Grade						Dockage				Average Dockage of Samples	
	1	2	3	4	5	Sample	Zero %	0.1-0.4%	0.5-0.9%	Over 0.9%	Over 0.9%	All
	----- Percent of Total 1/-----						----- Percent of Total 1/-----				---Percent---	
Cheyenne	16	42	40	2	0	0	0	2	82	16	1.1	0.8
Decatur	0	36	64	0	0	0	0	50	46	4	1.3	0.5
Graham	-	-	-	-	-	-	-	-	-	-	-	-
Norton	-	-	-	-	-	-	-	-	-	-	-	-
Rawlins	-	-	-	-	-	-	-	-	-	-	-	-
Sheridan	-	-	-	-	-	-	-	-	-	-	-	-
Sherman	8	55	35	2	0	0	0	17	69	14	1.1	0.7
Thomas	91	2	7	0	0	0	0	10	86	4	1.3	0.6
Northwest	44	29	26	1	0	0	0	14	77	9	1.2	0.6
Gove	72	21	5	2	0	0	0	5	69	26	1.1	0.8
Greeley	0	10	48	31	11	0	0	44	54	2	1.0	0.5
Lane	0	0	100	0	0	0	0	0	100	0	-	0.5
Logan	-	-	-	-	-	-	-	-	-	-	-	-
Ness	70	30	0	0	0	0	0	45	55	0	-	0.5
Scott	3	81	13	3	0	0	0	16	79	5	1.1	0.6
Trego	4	93	3	0	0	0	0	18	82	0	-	0.5
Wallace	0	1	99	0	0	0	0	69	31	0	-	0.4
Wichita	58	34	8	0	0	0	0	24	58	18	1.1	0.7
West Central	19	43	30	6	2	0	0	30	64	6	1.1	0.6
Clark	-	-	-	-	-	-	-	-	-	-	-	-
Finney	0	9	91	0	0	0	0	43	57	0	-	0.5
Ford	49	50	1	0	0	0	0	20	79	1	1.1	0.5
Grant	-	-	-	-	-	-	-	-	-	-	-	-
Gray	0	100	0	0	0	0	0	19	81	0	-	0.5
Hamilton	-	-	-	-	-	-	-	-	-	-	-	-
Haskell	0	38	62	0	0	0	0	77	23	0	-	0.4
Hodgeman	-	-	-	-	-	-	-	-	-	-	-	-
Kearny	50	50	0	0	0	0	0	83	17	0	-	0.4
Meade	32	62	6	0	0	0	0	31	63	6	1.2	0.6
Morton	22	67	11	0	0	0	0	26	70	4	1.4	0.6
Seward	40	60	0	0	0	0	0	2	91	7	1.1	0.7
Stanton	9	49	37	5	0	0	0	27	71	2	1.1	0.6
Stevens	1	78	21	0	0	0	0	28	71	1	1.2	0.6
Southwest	24	49	26	1	0	0	0	28	71	1	1.2	0.5
Clay	-	-	-	-	-	-	-	-	-	-	-	-
Cloud	95	5	0	0	0	0	0	99	1	0	-	0.2
Jewell	100	0	0	0	0	0	0	93	7	0	-	0.3
Mitchell	91	9	0	0	0	0	0	91	9	0	-	0.3
Osborne	47	50	3	0	0	0	0	66	34	0	-	0.4
Ottawa	-	-	-	-	-	-	-	-	-	-	-	-
Phillips	9	55	36	0	0	0	0	73	27	0	-	0.3
Republic	89	11	0	0	0	0	0	93	7	0	-	0.3
Rooks	22	63	15	0	0	0	0	58	42	0	-	0.4
Smith	48	52	0	0	0	0	0	95	5	0	-	0.3
Washington	-	-	-	-	-	-	-	-	-	-	-	-
North Central	88	11	1	0	0	0	0	94	6	0	-	0.3
Barton	74	24	2	0	0	0	0	59	40	1	1.2	0.4
Dickinson	79	21	0	0	0	0	0	74	26	0	-	0.4
Ellis	85	14	1	0	0	0	0	50	45	5	1.1	0.5
Ellsworth	61	38	1	0	0	0	0	85	13	2	1.2	0.4
Lincoln	100	0	0	0	0	0	0	100	0	0	-	0.4
McPherson	-	-	-	-	-	-	-	-	-	-	-	-
Marion	81	19	0	0	0	0	0	95	5	0	-	0.3
Rice	81	18	1	0	0	0	0	73	26	1	1.1	0.4
Rush	91	9	0	0	0	0	0	51	48	1	1.2	0.5
Russell	62	36	1	1	0	0	0	50	48	2	1.2	0.5
Saline	-	-	-	-	-	-	-	-	-	-	-	-
Central	79	20	1	0	0	0	0	67	32	1	1.3	0.4

WHEAT GRADES AND DOCKAGE - 2004 CROP

County and District	Grade						Dockage				Average Dockage of Samples	
	1	2	3	4	5	Sample	Zero %	0.1-0.4%	0.5-0.9%	Over 0.9%	Over 0.9%	All
	----- Percent of Total 1/-----						----- Percent of Total 1/-----				---Percent---	
Barber	43	57	0	0	0	0	0	63	35	2	1.2	0.4
Comanche	-	-	-	-	-	-	-	-	-	-	-	-
Edwards	100	0	0	0	0	0	0	90	10	0	-	0.3
Harper	-	-	-	-	-	-	-	-	-	-	-	-
Harvey	-	-	-	-	-	-	-	-	-	-	-	-
Kingman	56	44	0	0	0	0	0	62	36	2	1.0	0.4
Kiowa	15	84	1	0	0	0	0	37	63	0	-	0.5
Pawnee	87	12	1	0	0	0	0	61	39	0	-	0.4
Pratt	31	64	5	0	0	0	0	42	56	2	1.2	0.5
Reno	39	50	10	1	0	0	0	54	35	11	1.7	0.6
Sedgwick	43	57	0	0	0	0	0	68	21	11	1.2	0.5
Stafford	96	4	0	0	0	0	0	93	7	0	-	0.3
Sumner	0	68	32	0	0	0	0	59	41	0	-	0.4
South Central	37	50	13	0	0	0	0	57	41	2	1.3	0.5
Atchison	-	-	-	-	-	-	-	-	-	-	-	-
Brown	-	-	-	-	-	-	-	-	-	-	-	-
Doniphan	-	-	-	-	-	-	-	-	-	-	-	-
Jackson	-	-	-	-	-	-	-	-	-	-	-	-
Jefferson	-	-	-	-	-	-	-	-	-	-	-	-
Leavenworth	-	-	-	-	-	-	-	-	-	-	-	-
Marshall	99	1	0	0	0	0	0	100	0	0	-	0.2
Nemaha	-	-	-	-	-	-	-	-	-	-	-	-
Pottawatomie	-	-	-	-	-	-	-	-	-	-	-	-
Riley	-	-	-	-	-	-	-	-	-	-	-	-
Wyandotte	19	80	1	0	0	0	0	52	48	0	-	0.5
Northeast	99	1	0	0	0	0	0	100	0	0	-	0.2
Anderson	0	100	0	0	0	0	0	100	0	0	-	0.3
Chase	-	-	-	-	-	-	-	-	-	-	-	-
Coffey	0	100	0	0	0	0	0	83	17	0	-	0.3
Douglas	-	-	-	-	-	-	-	-	-	-	-	-
Franklin	2	96	2	0	0	0	0	57	43	0	-	0.4
Geary	-	-	-	-	-	-	-	-	-	-	-	-
Johnson	14	78	4	4	0	0	0	47	51	2	2.0	0.5
Linn	-	-	-	-	-	-	-	-	-	-	-	-
Lyon	-	-	-	-	-	-	-	-	-	-	-	-
Miami	-	-	-	-	-	-	-	-	-	-	-	-
Morris	-	-	-	-	-	-	-	-	-	-	-	-
Osage	-	-	-	-	-	-	-	-	-	-	-	-
Shawnee	100	0	0	0	0	0	0	50	50	0	-	0.5
Wabaunsee	-	-	-	-	-	-	-	-	-	-	-	-
East Central	4	93	2	1	0	0	0	61	39	0	0.0	0.3
Allen	0	63	34	3	0	0	0	65	35	0	-	0.4
Bourbon	-	-	-	-	-	-	-	-	-	-	-	-
Butler	-	-	-	-	-	-	-	-	-	-	-	-
Chautauqua	-	-	-	-	-	-	-	-	-	-	-	-
Cherokee	-	-	-	-	-	-	-	-	-	-	-	-
Cowley	31	69	0	0	0	0	0	63	31	6	2.1	0.5
Crawford	0	88	9	3	0	0	0	82	18	0	-	0.4
Elk	-	-	-	-	-	-	-	-	-	-	-	-
Greenwood	-	-	-	-	-	-	-	-	-	-	-	-
Labette	0	73	27	0	0	0	0	63	35	2	1.5	0.4
Montgomery	1	80	19	0	0	0	0	63	34	3	1.3	0.4
Neosho	0	77	22	1	0	0	0	70	30	0	-	0.4
Wilson	0	56	38	6	0	0	0	70	30	0	-	0.4
Woodson	-	-	-	-	-	-	-	-	-	-	-	-
Southeast	10	72	17	1	0	0	0	66	32	2	1.8	0.4
State	51	36	12	1	0	0	0	58	40	2	1.3	0.5

1/ May not add due to rounding. - Not published due to insufficient data or no samples taken, but included in district and State totals.

GRADE DEFECT PERCENTAGES

County and District	Samples Tested 2004 1/	Total Damaged Kernels			Foreign Material			Shrunken and Broken Kernels			Total Defects 2/		
		Average 1993-02	2003	2004	Average 1993-02	2003	2004	Average 1993-02	2003	2004	Average 1993-02	2003	2004
Cheyenne	43	0.1	0.1	3.0	0.0	0.0	0.0	2.1	1.6	1.5	2.3	1.6	4.5
Decatur	28	0.1	0.1	0.3	0.0	0.0	0.0	1.5	1.0	1.3	1.7	1.2	1.6
Graham	-	0.2	-	-	0.2	-	-	2.0	-	-	2.3	-	-
Norton	-	0.1	0.1	-	0.1	0.1	-	1.5	1.5	-	1.7	1.7	-
Rawlins	-	0.1	0.1	-	0.0	0.0	-	1.9	1.5	-	2.0	1.6	-
Sheridan	-	0.0	0.2	-	0.0	0.0	-	1.6	0.9	-	1.6	1.1	-
Sherman	92	0.0	0.1	1.4	0.0	0.0	0.0	1.9	1.5	1.2	1.9	1.6	2.7
Thomas	94	0.1	0.2	0.4	0.0	0.0	0.0	1.9	1.3	1.7	2.1	1.5	2.1
Northwest	259	0.1	0.1	1.0	0.0	0.0	0.0	1.8	1.3	1.5	2.0	1.5	2.5
Gove	42	0.1	0.2	0.6	0.0	0.0	0.1	1.7	1.1	1.4	1.8	1.3	2.1
Greeley	54	0.2	0.3	1.9	0.0	0.0	0.0	2.0	1.5	1.7	2.2	1.8	3.5
Lane	13	0.2	0.3	1.8	0.0	0.0	0.0	2.0	0.9	1.4	2.2	1.2	3.2
Logan	-	0.0	0.2	-	0.0	0.0	-	1.9	1.5	-	1.9	1.6	-
Ness	20	0.1	0.2	0.5	0.0	0.1	0.1	1.9	1.4	1.3	2.1	1.7	1.8
Scott	79	0.2	0.5	1.4	0.0	0.0	0.0	1.9	1.2	2.0	2.1	1.8	3.3
Trego	97	0.2	0.2	0.3	0.2	0.1	0.0	1.9	1.2	1.2	2.4	1.5	1.5
Wallace	90	0.2	0.2	1.5	0.0	0.0	0.0	1.9	1.3	1.4	2.0	1.4	2.9
Wichita	38	0.2	0.3	0.7	0.0	0.0	0.0	2.0	1.5	1.9	2.3	1.8	2.6
West Central	433	0.1	0.3	1.1	0.0	0.0	0.0	1.9	1.3	1.6	2.1	1.6	2.7
Clark	-	0.4	-	-	0.0	-	-	1.9	-	-	2.4	-	-
Finney	350	0.2	0.4	1.6	0.1	0.1	0.0	1.9	1.1	1.5	2.1	1.6	3.2
Ford	565	0.2	0.3	0.3	0.1	0.1	0.0	1.9	0.9	1.7	2.3	1.3	2.0
Grant	-	0.2	0.3	-	0.0	0.0	-	2.0	1.1	-	2.2	1.4	-
Gray	223	0.2	0.5	0.7	0.0	0.1	0.1	1.7	1.0	1.7	1.9	1.6	2.4
Hamilton	-	0.3	0.3	-	0.0	0.0	-	2.2	1.9	-	2.5	2.2	-
Haskell	77	0.3	0.2	0.7	0.0	0.0	0.0	1.7	0.7	1.7	2.0	0.9	2.3
Hodgeman	-	0.1	-	-	0.1	-	-	1.9	-	-	2.1	-	-
Keamy	6	0.1	-	2.3	0.1	-	0.0	1.5	-	0.7	1.6	-	3.0
Meade	243	0.3	0.3	0.5	0.1	0.0	0.1	1.6	0.8	1.4	2.0	1.1	2.0
Morton	240	0.3	0.3	0.3	0.0	0.0	0.0	2.1	1.0	1.7	2.4	1.3	2.0
Seward	60	0.2	0.3	0.3	0.1	0.0	0.0	1.8	1.1	1.4	2.1	1.4	1.7
Stanton	231	0.2	0.3	0.6	0.0	0.0	0.0	2.3	1.3	1.6	2.5	1.5	2.2
Stevens	85	0.2	0.3	1.2	0.0	0.0	0.1	2.0	0.7	1.6	2.2	1.0	2.8
Southwest	2081	0.2	0.3	0.9	0.1	0.0	0.0	1.9	1.1	1.4	2.2	1.4	2.4
Clay	-	0.1	-	-	0.2	-	-	1.3	-	-	1.6	-	-
Cloud	1338	0.3	0.4	0.7	0.2	0.2	0.1	1.7	1.2	0.9	2.3	1.8	1.7
Jewell	28	0.2	0.0	0.1	0.2	0.1	0.0	1.4	1.0	1.0	1.8	1.1	1.1
Mitchell	301	0.2	0.1	0.2	0.2	0.2	0.0	1.5	1.1	0.9	1.8	1.3	1.2
Osborne	96	0.2	0.1	0.2	0.1	0.1	0.2	1.5	1.3	1.0	1.9	1.5	1.3
Ottawa	-	0.1	-	-	0.4	-	-	1.4	-	-	1.9	-	-
Phillips	11	0.2	0.1	0.1	0.1	0.0	0.0	1.5	1.4	1.2	1.8	1.5	1.3
Republic	196	0.6	0.6	0.3	0.1	0.1	0.0	1.5	1.1	0.8	2.2	1.8	1.2
Rooks	40	0.1	-	0.2	0.1	-	0.0	1.5	-	0.9	1.7	-	1.1
Smith	73	0.2	0.0	0.7	0.1	0.0	0.0	1.3	1.1	0.8	1.5	1.1	1.5
Washington	-	0.8	-	-	0.1	-	-	1.4	-	-	2.2	-	-
North Central	2083	0.3	0.2	0.3	0.2	0.1	0.0	1.5	1.2	0.9	1.9	1.4	1.3
Barton	447	0.3	0.2	0.4	0.2	0.1	0.1	1.5	1.0	1.0	1.9	1.3	1.5
Dickinson	96	0.2	1.5	0.4	0.1	0.2	0.1	1.4	1.4	1.2	1.7	3.1	1.7
Ellis	111	0.3	0.2	0.5	0.1	0.1	0.0	1.7	1.2	1.0	2.1	1.5	1.5
Ellsworth	87	0.2	0.3	0.6	0.1	0.2	0.1	1.4	1.1	1.2	1.7	1.6	1.9
Lincoln	3	0.2	0.1	0.5	0.1	0.1	0.1	1.6	1.2	0.8	1.9	1.4	1.4
McPherson	-	0.3	-	-	0.2	-	-	1.5	-	-	2.1	-	-
Marion	238	0.3	0.3	0.5	0.2	0.2	0.1	1.5	1.2	1.2	2.0	1.6	1.7
Rice	423	0.2	0.1	0.4	0.1	0.1	0.1	1.3	0.9	1.1	1.7	1.1	1.6
Rush	221	0.2	0.2	0.5	0.1	0.1	0.0	1.7	1.2	1.1	2.0	1.4	1.6
Russell	133	0.2	0.3	0.4	0.1	0.1	0.1	1.5	0.9	1.0	1.9	1.3	1.5
Saline	-	0.5	-	-	0.3	-	-	2.0	-	-	2.7	-	-
Central	1759	0.3	0.4	0.5	0.2	0.1	0.1	1.5	1.1	1.1	1.9	1.6	1.6

GRADE DEFECT PERCENTAGES

County and District	Samples Tested 2004 ^{1/}	Total Damaged Kernels			Foreign Material			Shrunken and Broken Kernels			Total Defects ^{2/}		
		Average 1993-02	2003	2004	Average 1993-02	2003	2004	Average 1993-02	2003	2004	Average 1993-02	2003	2004
Barber	91	0.1	0.1	0.1	0.1	0.2	0.1	1.7	1.2	1.6	1.9	1.5	1.8
Comanche	-	0.2	-	-	0.3	-	-	1.9	-	-	2.4	-	-
Edwards	20	0.2	0.1	0.2	0.0	0.0	0.0	1.5	1.1	1.0	1.7	1.2	1.3
Harper	-	0.1	0.0	-	0.4	0.4	-	2.1	0.8	-	2.6	1.2	-
Harvey	-	0.2	-	-	0.2	-	-	1.4	-	-	1.8	-	-
Kingman	237	0.2	0.0	0.2	0.3	0.3	0.1	1.5	1.3	1.6	1.9	1.7	2.0
Kiowa	75	0.3	0.1	0.2	0.1	0.1	0.0	1.5	0.7	1.2	1.9	0.9	1.5
Pawnee	574	0.2	0.2	0.4	0.1	0.1	0.1	1.8	0.9	1.0	2.1	1.2	1.6
Pratt	343	0.2	0.1	0.3	0.2	0.1	0.2	1.6	1.2	1.6	2.0	1.4	2.1
Reno	82	0.4	0.3	1.8	0.3	0.2	0.2	1.7	1.3	1.3	2.5	1.9	3.3
Sedgwick	63	0.7	1.4	0.5	0.2	0.2	0.1	1.8	1.5	1.7	2.7	3.1	2.3
Stafford	28	0.2	-	0.3	0.2	-	0.2	1.5	-	0.9	1.9	-	1.4
Sumner	348	0.2	0.2	0.4	0.2	0.6	0.1	1.8	1.5	1.9	2.2	2.4	2.4
South Central	1861	0.3	0.3	0.5	0.2	0.3	0.1	1.7	1.2	1.5	2.1	1.8	2.2
Atchison	-	1.1	-	-	0.1	-	-	1.2	-	-	2.4	-	-
Brown	-	1.0	-	-	0.0	-	-	0.8	-	-	1.8	-	-
Doniphan	-	-	-	-	-	-	-	-	-	-	-	-	-
Jackson	-	-	-	-	-	-	-	-	-	-	-	-	-
Jefferson	-	-	-	-	-	-	-	-	-	-	-	-	-
Leavenworth	-	-	-	-	-	-	-	-	-	-	-	-	-
Marshall	125	0.6	0.2	0.6	0.1	0.0	0.0	1.1	0.7	0.7	1.8	0.9	1.2
Nemaha	-	1.3	-	-	0.1	-	-	1.4	-	-	2.8	-	-
Pottawatomie	-	-	-	-	-	-	-	-	-	-	-	-	-
Riley	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyandotte	328	1.4	0.3	1.2	0.1	0.1	0.1	1.2	1.8	1.0	2.8	2.2	2.3
Northeast	453	0.8	0.2	0.6	0.1	0.0	0.0	1.1	0.7	0.6	2.0	0.9	1.2
Anderson	3	-	-	1.0	-	-	0.2	-	-	0.9	-	-	2.2
Chase	-	0.2	-	-	0.0	-	-	2.4	-	-	2.6	-	-
Coffey	6	0.3	-	1.2	0.0	-	0.0	0.9	-	0.7	1.3	-	2.0
Douglas	-	3.2	-	-	0.1	-	-	1.3	-	-	4.6	-	-
Franklin	54	0.5	0.9	1.2	0.0	0.1	0.1	0.9	0.6	0.8	1.4	1.5	2.1
Geary	-	-	-	-	-	-	-	-	-	-	-	-	-
Johnson	51	0.8	1.0	1.5	0.1	0.1	0.1	2.5	0.7	0.8	3.5	1.7	2.4
Linn	-	0.8	0.9	-	0.1	0.1	-	0.9	0.6	-	1.7	1.6	-
Lyon	-	-	-	-	-	-	-	-	-	-	-	-	-
Miami	-	-	-	-	-	-	-	-	-	-	-	-	-
Morris	-	0.3	-	-	0.2	-	-	1.4	-	-	1.8	-	-
Osage	-	0.8	-	-	0.1	-	-	0.9	-	-	1.8	-	-
Shawnee	4	0.6	0.4	0.6	0.1	0.4	0.0	1.6	0.7	1.3	2.3	1.5	1.9
Wabaunsee	-	-	-	-	-	-	-	-	-	-	-	-	-
East Central	118	0.7	0.9	1.2	0.1	0.1	0.1	1.3	0.6	0.8	2.2	1.6	2.1
Allen	83	0.4	0.9	1.4	0.0	0.1	0.1	0.8	0.8	0.9	1.2	1.8	2.4
Bourbon	-	-	-	-	-	-	-	-	-	-	-	-	-
Butler	-	0.2	-	-	0.2	-	-	1.5	-	-	1.9	-	-
Chautauqua	-	-	-	-	-	-	-	-	-	-	-	-	-
Cherokee	-	1.2	-	-	0.1	-	-	1.0	-	-	2.2	-	-
Cowley	124	0.4	0.3	0.3	0.2	0.3	0.1	1.5	1.5	1.4	2.0	2.2	1.7
Crawford	33	1.7	1.1	1.2	0.1	0.1	0.1	1.0	0.8	0.9	2.7	2.0	2.2
Elk	-	-	-	-	-	-	-	-	-	-	-	-	-
Greenwood	-	-	-	-	-	-	-	-	-	-	-	-	-
Labette	93	0.4	0.8	1.5	0.1	0.1	0.1	1.1	1.2	1.1	1.5	2.1	2.7
Montgomery	90	0.9	0.5	1.3	0.1	0.1	0.0	1.3	1.1	1.1	2.3	1.7	2.4
Neosho	279	0.7	1.0	1.9	0.1	0.1	0.1	1.2	0.9	0.9	2.0	2.1	2.8
Wilson	77	0.8	0.8	3.0	0.1	0.1	0.1	1.3	1.2	1.1	2.2	2.1	4.1
Woodson	-	-	-	-	-	-	-	-	-	-	-	-	-
Southeast	780	0.8	0.7	1.2	0.1	0.2	0.1	1.3	1.2	1.1	2.2	2.0	2.3
State	9827	0.2	0.3	0.7	0.1	0.1	0.1	1.7	1.2	1.3	2.1	1.6	2.1

1/ Samples tested represent data from inspection certificates of railroad cars (truckloads are converted to carlot equivalents). Summarized data include old crop and new crop wheat moving from first point of sale and inspected by the Kansas Grain Inspection Service, Inc. 2/ Percentages by defect may not add to total due to rounding. - Not published due to insufficient data or no samples taken, but included in district and State totals.

2004 KANSAS WHEAT VARIETIES

Jagger was the leading variety of wheat seeded in Kansas for the 2004 crop. Accounting for 40.9 percent of the State's wheat, Jagger decreased 4.3 points from a year ago but was the most popular variety in seven of the nine districts. The KSU-maintained variety 2137 ranked second, with 8.6 percent of the acreage, and ranked in the top 5 for all nine districts. TAM 110 remained in third position, increasing nearly 1 point from last year. Trego, a hard white wheat, moved up to fourth place with 3.5 percent of the acreage. New to the top ten is Jagalene, ranking fifth with 3.0 percent. The OSU-maintained variety 2174 moved down to sixth place with 2.8 percent of the State's acreage. Karl and improved Karl fell to seventh place, with 2.3 percent. Ike held eighth place with 2.0 percent. New to the top ten is T81, ranking ninth with 1.8 percent. Dominator remained in the top ten with 1.5 percent. Acres planted with blended varieties were not included in the rankings by variety. Blends accounted for 15.2 percent of the State's planted acres and were used more extensively in the north central and central areas of the State. Out of the total acres planted with blends, 92.4 percent included Jagger in the blend and 50.2 percent had 2137 in the blend. Hard White varieties accounted for 4.9 percent of the State's acreage. Trego was the leading Hard White variety, accounting for 72 percent of the State's white wheat. The majority of the white wheat was planted in the western third of the State. This Wheat Variety project is funded by the Kansas Wheat Commission.

DISTRIBUTION OF KANSAS WINTER WHEAT VARIETIES, 1995-2004

Variety	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
PERCENT OF SEEDED ACREAGE										
Jagger	--	1.0	6.4	20.2	29.2	34.0	35.8	42.8	45.2	40.9
2137	--	--	1.0	13.5	22.0	23.1	22.3	15.5	13.3	8.6
TAM 110	--	--	--	--	0.5	1.3	2.8	3.0	3.8	4.2
Trego1/	--	--	--	--	--	--	0.3	0.8	1.8	3.5
Jagalene	--	--	--	--	--	--	--	--	--	3.0
2174	--	--	--	--	--	1.1	3.0	3.1	3.1	2.8
Karl/Karl 92	22.4	20.9	22.1	10.8	5.9	3.5	3.3	3.6	3.2	2.3
Ike	0.9	7.2	10.5	7.0	5.5	4.1	3.6	2.6	2.1	2.0
T81	--	--	--	--	--	0.2	0.2	0.8	0.6	1.8
Dominator	--	--	--	0.2	0.8	1.4	1.5	2.0	2.2	1.5
2145	--	--	--	--	--	--	--	--	--	1.5
Stanton	--	--	--	--	--	--	--	0.1	0.6	1.4
Thunderbolt	--	--	--	--	--	--	0.2	0.6	0.8	1.4
TAM 107	20.6	17.1	17.0	12.6	8.3	6.3	5.3	2.9	2.3	1.3
Akron	--	--	--	0.4	0.8	1.0	0.4	0.4	0.2	0.9
Cutter	--	--	--	--	--	--	--	--	--	0.7
NuFrontier1/	--	--	--	--	--	--	--	0.1	0.3	0.6
Coronado	--	--	--	0.8	1.3	1.0	1.1	0.7	0.8	0.5
TAM 105	--	--	--	--	0.3	0.4	0.1	--	--	0.4
Lamed	7.6	4.8	3.6	2.4	1.9	1.2	1.0	0.9	0.8	0.4
2163	17.1	19.8	15.4	10.4	3.4	2.3	2.0	1.3	0.8	0.3
Lakin1/	--	--	--	--	--	--	--	0.1	0.2	0.3
Ogallala	0.2	1.5	1.3	0.8	0.7	0.8	0.4	0.4	0.2	0.3
Vista	0.3	0.8	1.2	1.1	0.9	0.9	1.0	0.9	0.3	0.2
Above	--	--	--	--	--	--	--	--	--	0.2
Scout/Scout 66	1.0	1.2	0.8	0.7	0.5	0.3	0.1	0.2	0.2	0.2
Tomahawk	7.0	4.7	3.1	1.8	1.2	0.8	0.4	0.3	0.1	0.2
Venango	--	--	--	--	--	--	--	0.1	0.1	0.2
Alliance	--	--	--	--	0.1	0.3	0.5	0.3	0.1	0.2
Platte1/	--	--	--	--	--	--	--	--	--	0.2
NuHorizon1/	--	--	--	--	--	--	--	--	0.2	0.2
Blends	--	--	--	2.6	6.1	7.5	7.0	11.5	12.8	15.2

NOTE: -- = Data not available for variety or blends, or acreage is included in Other Hard Varieties.

1/ Hard White Winter variety. 2/ 0 = less than .1 percent.