2003

WHEAT QUALITY

Kansas Wheat Commission **Kansas Department of Agriculture**

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.

Bushels to Metric Tons:

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

1 Metric Ton Equals:

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

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

Area:

- 1 Acre = .404694 Hectares
- 1 Hectare = 2.4710 Acres

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, 2003 is forecast at 475.3 million bushels (12,935,550 metric tons).

KANSAS WHEAT QUALITY 2003

KANSAS
AGRICULTURAL
STATISTICS SERVICE

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For Agriculture

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Issued September 2003

FOREWORD

The Kansas Wheat Commission joins the Kansas Department of Agriculture in presenting this 2003 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
State Statistician

Betty Bunck, Chairman
Kansas Wheat Commission

2003 KANSAS WHEAT QUALITY

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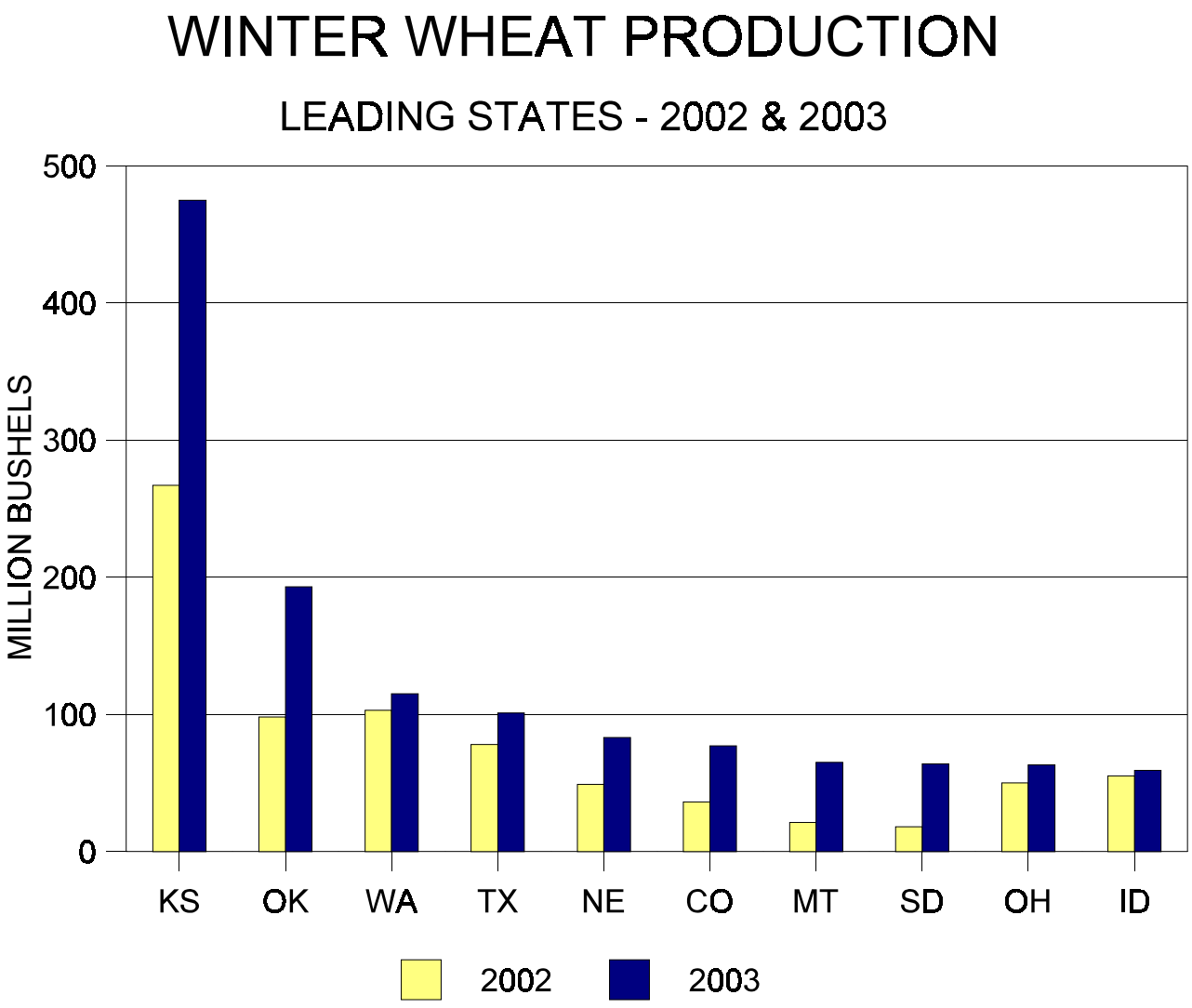
WHEAT SITUATION

World wheat production as of August 1, 2003 is expected to total 549.4 million metric tons (20.2 billion bushels), down 1 percent from a year ago. Total U.S. wheat production, at 62.4 million metric tons, will be up 42 percent from a year ago and will account for about 11 percent of the world total. Winter wheat production in the U.S. is estimated at 46.6 million metric tons, or about 75 percent of the total U.S. wheat production. Kansas, with an estimated 12.9 million metric tons of winter wheat, will account for 28 percent of the U.S. winter wheat production. This output represents 21 percent of the total U.S. wheat output and 2 percent of the world total.



ACRES OF WHEAT PLANTED BY SIZE GROUP

Kansas farmers with 500 or more acres of wheat planted accounted for 24.9 percent of all wheat farms and represented 67.5 percent of acres planted in the fall of 2002. The wheat acres planted totaled 10,300,000 acres.

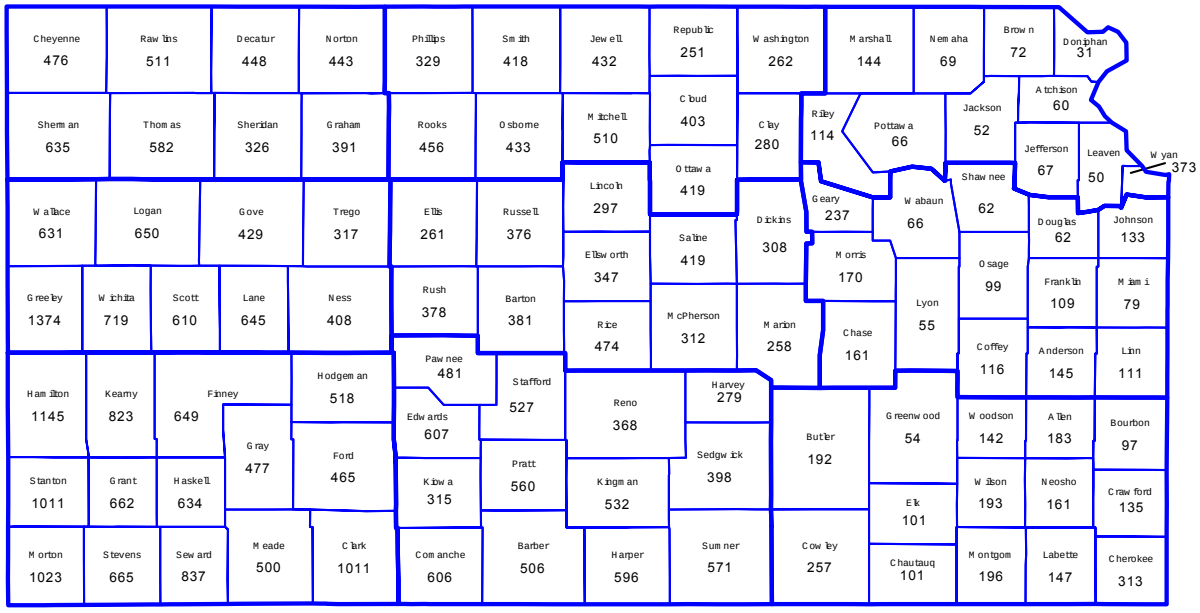
WHEAT PLANTED IN KANSAS FOR 2003 HARVEST, BY SIZE GROUPS

Acres of Wheat Planted per Farm	Number of Farms	Percent of Farms	Acres of Wheat Planted
1-24	2,700	9.1	35,000
25-74	5,300	17.5	224,800
75-199	6,600	22.0	757,800
200-499	7,900	26.5	2,332,600
500-749	3,200	10.6	1,768,400
750-999	1,600	5.3	1,260,700
1,000-1,999	2,300	7.5	2,713,300
2,000-2,999	300	1.1	714,100
3,000 +	100	0.4	493,300
State	30,000	100.0	10,300,000

AVERAGE ACRES PLANTED, BY COUNTY

Greeley County led the State with an average of 1,374 acres of wheat planted per farm, followed by Hamilton County with 1,145 acres and Morton County with 1,023 acres. Statewide, the average is 343 acres of wheat planted per farm.

ACRES OF WHEAT PLANTED PER FARM, 2003 HARVEST



U.S. WHEAT SUPPLY AND DISAPPEARANCE, 1995-2003

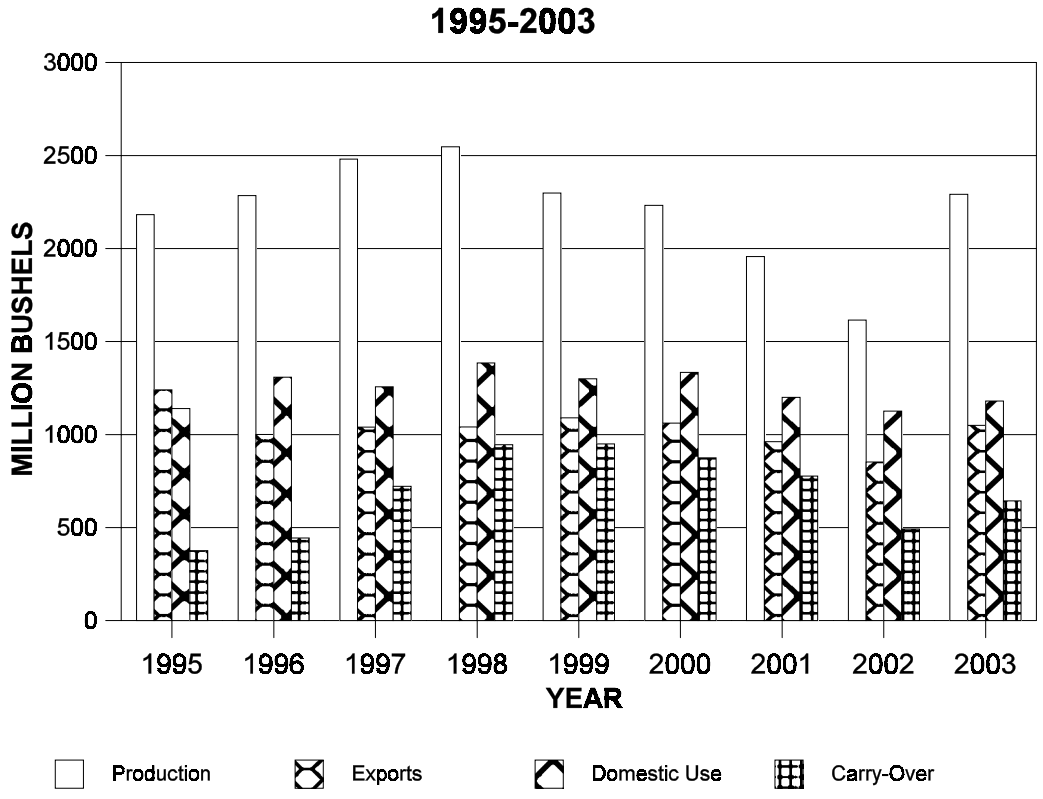
U.S. wheat supplies for the 2003/04 season are expected to be 2,874 million bushels, up 16 percent from last year. Beginning stocks, at 492 million bushels, are down 37 percent from a year ago. Estimated U.S. wheat production as of August 1, at 2,292 million bushels, is up 42 percent from last year. Disappearance is expected to total 2,230 million bushels, compared with 1,979 million bushels for 2002. Domestic use is expected to account for 1,180 million bushels, up 5 percent from the previous year. Exports, forecast at 1,050 million bushels, are 23 percent above a year ago. Carry-over at the end of the crop year is expected to total 644 million bushels, 31 percent above the 2002/03 level.

U.S. WHEAT SUPPLY AND DISAPPEARANCE, 1995-2003

Year Beginning June 1	Supply			Disappearance			Ending Stocks May 31
	Beginning Stocks	Production	Total 1/	Domestic Use	Exports	Total 2/	
	Million Bushels						
1995/96	507	2,183	2,757	1,140	1,241	2,381	376
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	1,616	2,471	1,126	853	1,979	492
2003/04 3/	492	2,292	2,874	1,180	1,050	2,230	644

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

U.S. WHEAT SUPPLY & DISAPPEARANCE



KANSAS WHEAT STOCKS

Marketing Year	September 1	December 1	March 1	June 1
	- - - - - - - - - - - - - - - - - - Thousand Bushels - - - - - - - - - - - - - - - - - -			
1997/98	351,810	244,197	213,301	106,901
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

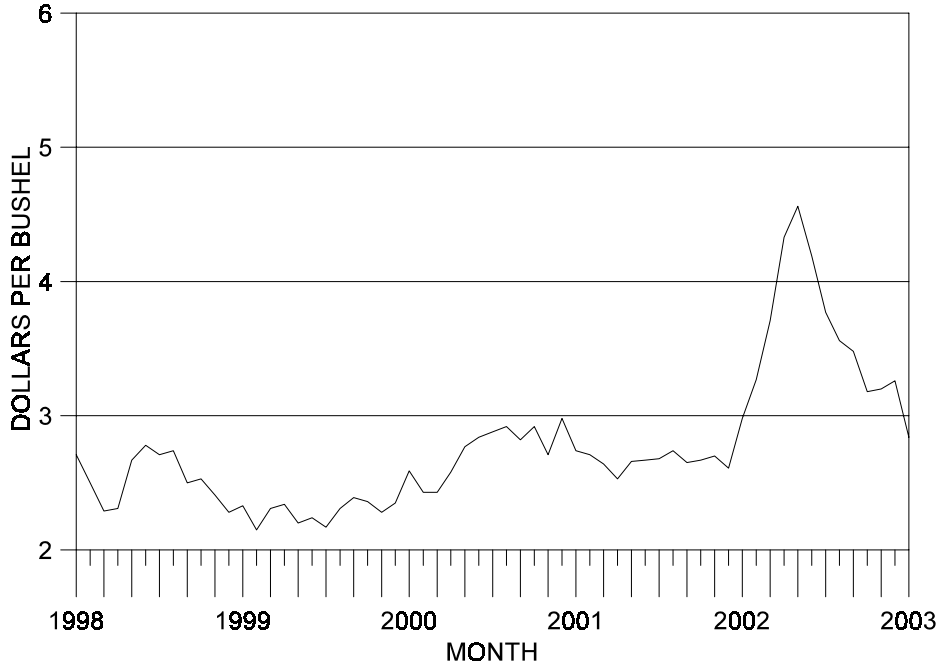
MONTHLY MARKETINGS OF KANSAS WHEAT, 1997-2002

Month	1997-98	1998-99	1999-00	2000-01	2001-02	5-Year Average 1/
	- Percent -					
June	7	13	6	16	13	11
July	34	23	37	19	26	28
August	10	10	11	15	7	11
September	4	9	7	6	3	6
October	4	8	2	8	7	6
November	4	4	3	4	4	4
December	7	7	6	5	10	7
January	8	6	10	10	9	9
February	5	3	7	3	7	5
March	6	8	4	3	4	5
April	6	4	3	8	6	5
May	5	5	4	3	4	4

1/ May not add due to rounding.

KANSAS WHEAT PRICES

JUNE 1998-JUNE 2003



HIGHLIGHTS OF THE 2003 CROP

The 2003 Kansas wheat crop, as of August 1, 2003 was estimated at 475.3 million bushels, up 78 percent from last year. Wheat was planted on 10.3 million acres for the 2003 crop, up 7 percent from 2002. The acres harvested for grain totaled 9.7 million acres, up 1.6 million acres from last year.

Seeding of wheat acres began the first week of September and progressed ahead of normal through completion. Fifty percent was seeded and 18 percent was emerged by the end of September, ahead of the 5-year averages of 36 percent and 14 percent, respectively. Widespread showers the first week and the last two weeks of October helped improve soil moisture for the seeding of wheat. Wheat seeding was 96 percent complete and emergence was at 87 percent by the first of November. Wheat condition was just above 50 percent good to excellent all fall and by the first of December was up to 59 percent good to excellent. Ninety-eight percent of the crop was emerged by the first of December.

Wheat condition declined during the winter due to dry conditions. On March 2, 26 percent of the crop was rated in poor to very poor condition. By the end of March, weeds were becoming a problem in some areas. On April 27th, 16 percent of the crop was judged to be in poor to very poor condition compared to 40 percent last year. Widespread showers the last two weeks of April helped improve conditions. Subsoil remained short to very short in most of the Western, North Central, and Central parts of the State despite the rains. Crop progress was near normal during the spring with 86 percent jointed on April 27th, compared with 66 percent last year and the 5-year average of 80 percent. The crop began to head the last week of April and progressed ahead of normal throughout May. Moderate temperatures and widespread scattered showers during May and June encouraged wheat head development which, in turn, contributed to higher than expected yields.

Harvest of the 2003 crop began in a few areas during the second week of June. Scattered showers slowed harvest initially but by the last week of June, harvest progress was nearly average. Producers made rapid progress with harvest as the weather turned hot and dry and were ahead of average by July 6. Harvest was virtually complete by the second week of July. Protein content for the 2003 crop averaged 11.7 percent with test weight at 60.7 pounds per bushel and moisture at 11.5 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 - - -	
1994	11,900	11,400	38.0	433,200	60.3	12.1	11.4
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	9,600	8,100	33.0	267,300	60.0	13.1	11.2
2003	10,300	9,700	49.0	475,300	60.7	11.7	11.5

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
1994	4,816	4,614	2.6	11,790	77.7
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	3,885	3,278	2.2	7,275	77.3
2003	4,168	3,926	3.3	12,936	78.2

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.

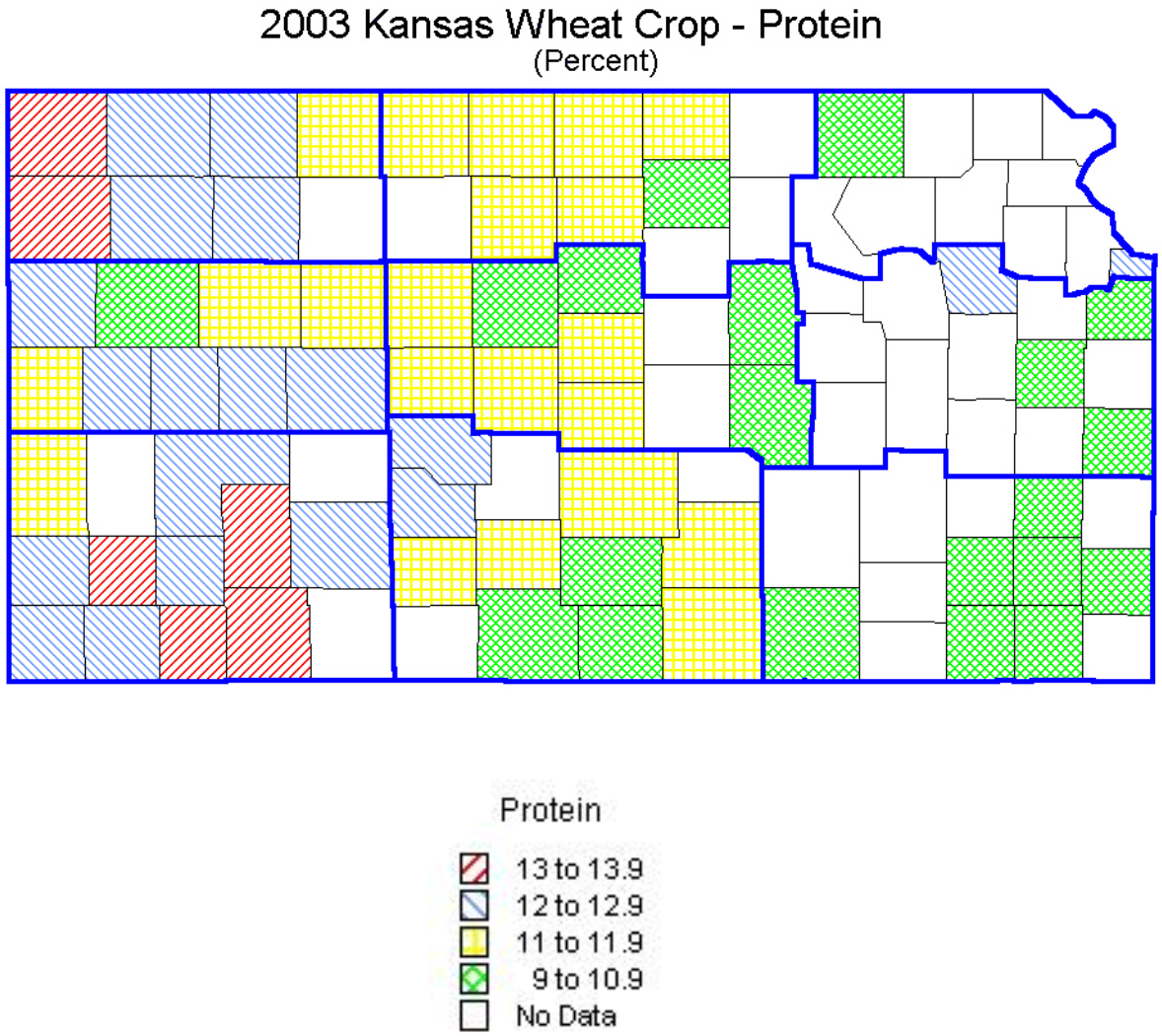
GRADES AND GRADE REQUIREMENTS FOR HARD RED WINTER WHEAT

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

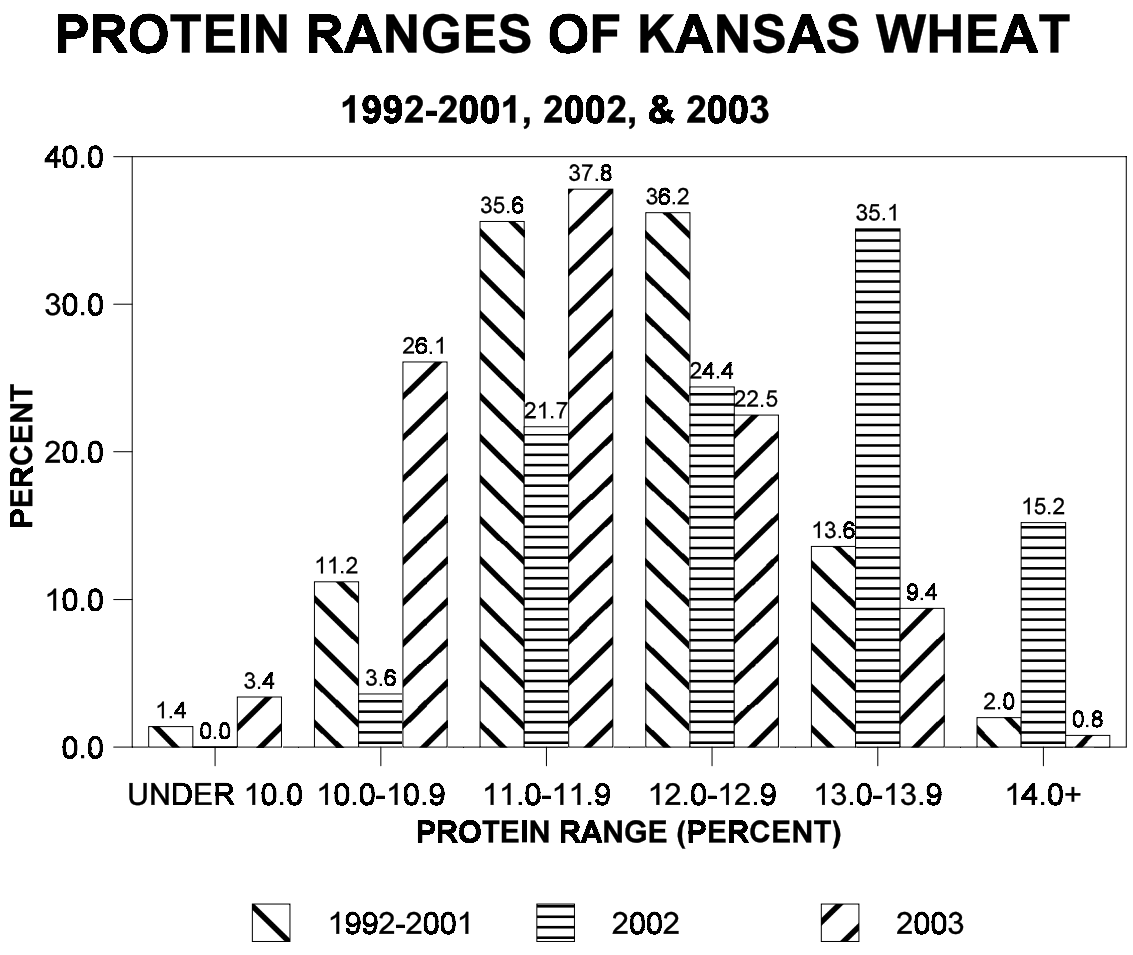
The average protein content of the 2003 Kansas wheat crop was 11.7 percent, down from last year's 13.1. This year's protein is also down from the 10-year average of 12.0 percent. By district, protein content ranged from 10.3 percent in the east central and southeast districts to 12.7 percent in the southwest district. Cheyenne led all counties, averaging 13.8 percent protein. Second highest was Seward County, averaging 13.6 percent protein. See the map below for average protein content by county.



PROTEIN RANGES OF 2003 KANSAS WHEAT 1/

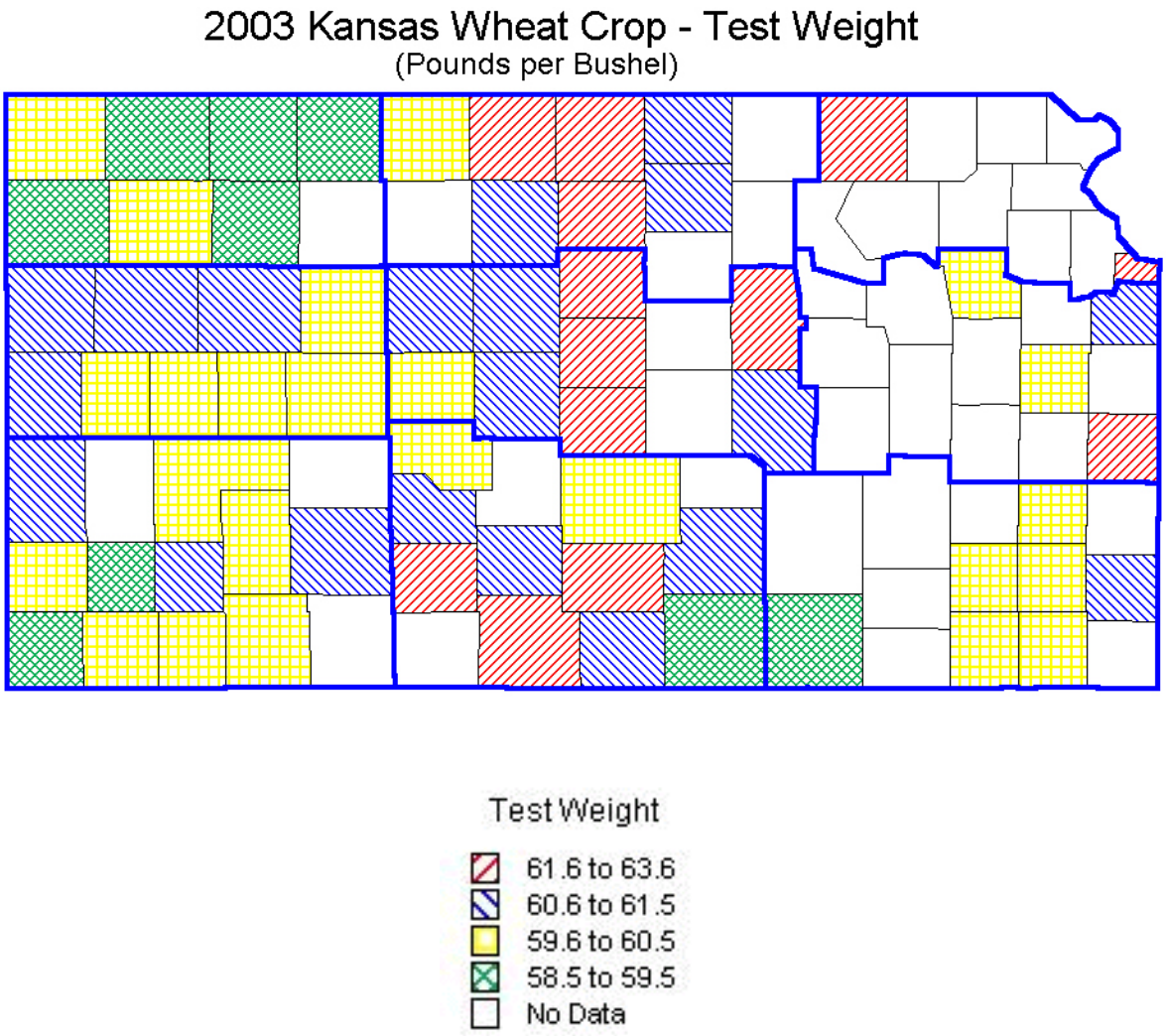
% Protein	District Production (000 bu.)									
	NW	WC	SW	NC	C	SC	NE	EC	SE	State
	39,200	47,600	58,500	76,200	85,800	112,900	12,300	15,000	27,800	475,300
	- Percent -									
Under 10.0	0.2	1.0	0.0	0.4	1.8	0.7	0.0	29.4	30.4	3.4
10.0-10.9	4.6	3.9	0.2	32.1	47.0	20.6	44.5	68.6	60.1	26.1
11.0-11.9	22.8	45.1	9.6	60.4	47.5	45.5	22.2	0.0	9.2	37.8
12.0-12.9	41.4	42.6	54.1	6.7	3.5	25.8	11.1	2.0	0.2	22.5
13.0-13.9	26.6	7.0	33.7	0.4	0.2	6.9	22.2	0.0	0.1	9.4
14.0-Over	4.4	0.4	2.4	0.0	0.0	0.5	0.0	0.0	0.0	0.8
	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.



TEST WEIGHT

The 2003 Kansas wheat crop averaged 60.7 pounds per bushel, compared with 60.0 pounds for the 2002 crop. The 10-year average for Kansas is 60.1 pounds per bushel. By district, test weights fell in a range from 59.6 pounds in the northwest to 62.6 pounds in the northeast district. The north central district was second highest in test weight at 61.5 pounds. Marshall County, with a test weight of 62.6 pounds, was the highest in the State. Kingman County followed at 62.4 pounds. See the map below for average weight per bushel by county.

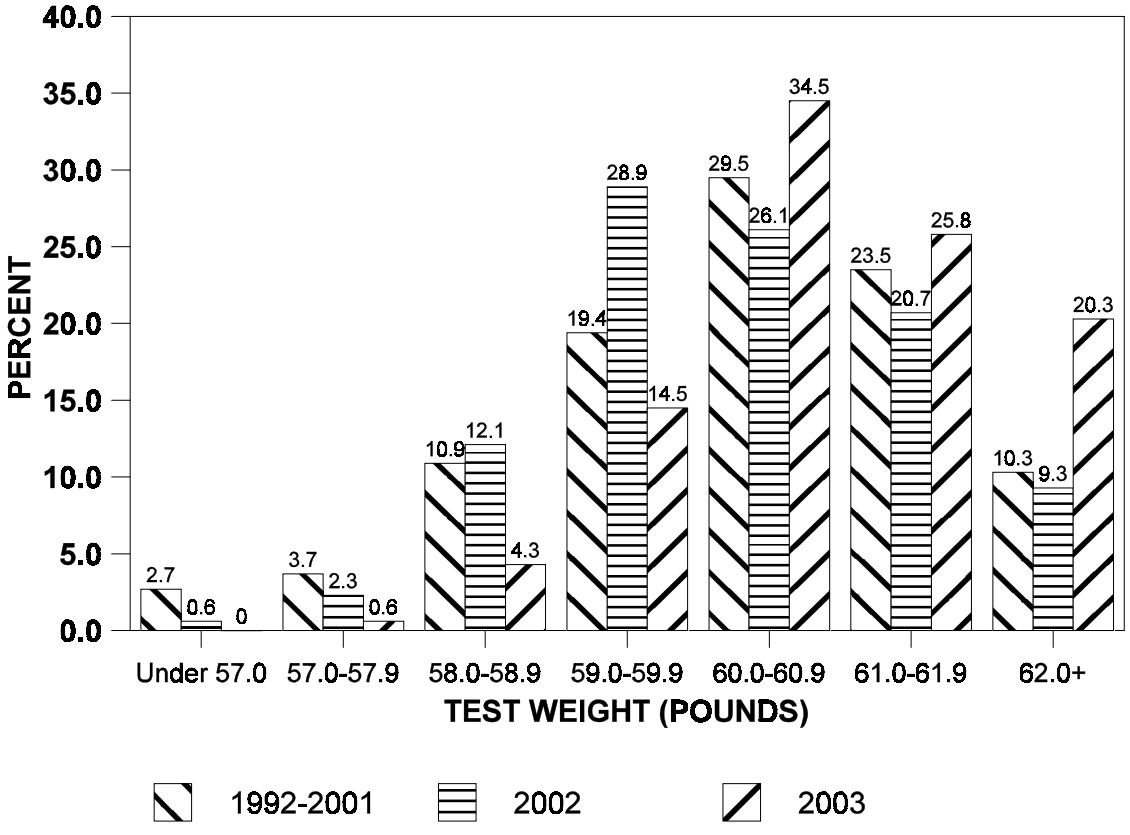


RANGES OF 2003 TEST WEIGHTS

Pounds per Bushel	District Production (000 bu.)									
	NW	WC	SW	NC	C	SC	NE	EC	SE	State
	39,200	47,600	58,500	76,200	85,800	112,900	12,300	15,000	27,800	475,300
	- Percent -									
Under 55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55.0-55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
56.0-56.9	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
57.0-57.9	2.2	0.3	0.2	0.1	0.1	0.8	0.0	0.0	1.4	0.6
58.0-58.9	16.2	5.7	3.0	1.2	1.6	4.0	0.0	0.0	9.2	4.3
59.0-59.9	29.9	18.3	24.8	4.6	7.1	14.0	0.0	21.6	19.9	14.5
60.0-60.9	47.6	48.8	59.4	21.8	22.4	32.3	0.0	27.4	39.8	34.5
61.0-61.9	3.7	20.8	10.7	40.5	36.4	24.4	33.3	27.5	25.3	25.8
62.0-Over	0.2	6.1	1.9	31.8	32.4	24.4	66.7	23.5	4.3	20.3
	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

1992-2001, 2002, & 2003



WEIGHT, PROTEIN, AND MOISTURE

County and District	Samples Tested 2003 1/	Test Weight			Protein Content 2/			Moisture		
		Average 1992-01	2002	2003	Average 1992-01	2002	2003	Average 1992-01	2002	2003
Cheyenne	37	59.9	58.5	59.9	12.6	14.1	13.8	11.3	10.3	10.8
Decatur	156	59.7	60.4	59.2	12.3	13.9	12.0	11.8	10.3	10.8
Graham	*	59.4	*	*	11.3	*	*	11.9	*	*
Norton	136	60.0	60.0	59.1	12.0	14.4	11.4	11.8	9.3	10.6
Rawlins	121	59.6	59.5	59.5	12.3	13.4	12.0	11.4	10.6	10.8
Sheridan	27	57.3	*	59.1	11.8	*	12.7	11.4	*	11.2
Sherman	301	59.9	59.4	59.6	12.4	14.2	13.4	11.6	10.0	9.7
Thomas	799	59.8	59.9	60.1	12.5	13.4	12.4	11.5	10.5	10.7
Northwest	**1,577**	**59.8**	**59.6**	**59.6**	**12.4**	**13.9**	**12.6**	**11.6**	**10.2**	**10.6**
Gove	275	59.9	60.0	61.5	12.2	13.6	11.7	11.6	10.5	11.0
Greeley	150	60.7	60.3	61.1	11.4	12.2	11.6	11.1	10.6	10.7
Lane	98	60.1	58.9	60.5	11.8	13.7	12.3	11.6	10.2	11.0
Logan	47	60.4	61.3	61.4	11.9	12.4	10.2	11.4	10.8	10.4
Ness	178	60.1	58.8	59.9	11.8	13.0	12.0	12.2	10.8	11.2
Scott	556	60.3	59.4	60.0	12.1	13.8	12.4	11.6	10.4	10.6
Trego	700	60.7	59.7	60.4	11.8	13.0	11.6	11.9	10.9	11.0
Wallace	385	60.4	*	60.8	12.2	*	12.3	11.7	*	10.4
Wichita	221	60.9	60.5	59.9	11.7	12.6	12.3	11.5	10.5	10.7
West Central	**2,610**	**60.4**	**59.9**	**60.6**	**11.9**	**13.0**	**11.8**	**11.6**	**10.6**	**10.8**
Clark	*	59.9	*	*	12.5	*	*	12.0	*	*
Finney	438	60.3	59.7	60.1	12.4	13.4	12.3	11.5	10.6	10.9
Ford	532	60.3	59.7	60.7	12.3	13.5	12.8	11.9	11.3	12.1
Grant	64	60.8	58.8	59.5	12.4	14.6	13.1	11.1	10.9	10.8
Gray	309	60.4	*	60.3	12.6	*	13.0	11.5	*	11.2
Hamilton	25	60.3	60.9	61.6	12.1	11.9	11.6	11.1	10.6	11.6
Haskell	28	60.1	*	61.1	12.3	*	12.9	11.4	*	11.8
Hodgeman	*	59.5	*	*	12.3	*	*	12.4	*	*
Kearny	*	61.1	59.7	*	11.6	13.6	*	10.9	10.1	*
Meade	232	60.5	60.1	60.6	12.6	14.1	13.5	11.9	12.3	11.8
Morton	88	60.3	60.8	59.6	12.5	13.0	12.2	10.5	10.1	11.4
Seward	34	60.7	60.8	60.1	12.7	13.6	13.6	11.2	10.8	11.6
Stanton	334	60.2	60.2	59.7	12.3	13.6	12.5	10.6	9.7	10.8
Stevens	26	60.5	*	60.4	12.7	*	12.8	10.9	*	11.6
Southwest	**2,110**	**60.4**	**60.0**	**60.4**	**12.4**	**13.4**	**12.7**	**11.4**	**10.7**	**11.4**
Clay	*	60.1	*	*	11.5	*	*	12.1	*	*
Cloud	1,318	59.5	61.9	61.5	11.7	12.7	10.9	12.1	10.9	11.7
Jewell	52	59.9	62.2	62.2	12.0	13.4	11.1	12.2	11.0	11.4
Mitchell	770	60.1	61.5	61.7	12.0	13.6	11.2	12.1	11.1	11.9
Osborne	423	59.9	60.6	61.2	12.2	14.2	11.5	12.0	10.4	11.4
Ottawa	*	60.2	61.2	*	12.0	12.3	*	12.0	11.5	*
Phillips	161	60.0	*	60.1	12.2	*	11.2	11.7	*	10.8
Republic	363	59.6	61.8	61.1	12.2	12.6	11.1	12.0	11.1	11.3
Rooks	*	59.6	59.1	*	12.0	14.0	*	11.9	10.2	*
Smith	267	60.0	61.4	61.9	12.2	14.2	11.8	11.9	10.2	11.4
Washington	*	59.6	*	*	11.9	*	*	12.3	*	*
North Central	**3,354**	**59.8**	**61.3**	**61.5**	**12.0**	**13.4**	**11.3**	**12.0**	**10.8**	**11.4**
Barton	504	60.3	59.8	61.2	12.5	13.6	11.1	12.1	11.8	11.7
Dickinson	698	60.0	59.6	61.7	11.4	12.5	10.6	12.5	12.2	12.6
Ellis	243	60.5	59.3	60.7	11.8	13.1	11.3	12.0	10.9	11.1
Ellsworth	79	60.2	60.7	61.8	12.0	13.2	11.0	12.1	12.2	11.7
Lincoln	246	59.8	60.2	62.2	11.9	13.1	10.6	11.8	11.0	11.9
McPherson	*	59.8	*	*	12.1	*	*	12.1	*	*
Marion	137	59.9	59.7	61.5	11.4	11.9	10.3	12.4	11.7	12.7
Rice	382	60.3	60.0	61.8	12.4	12.8	11.2	12.2	11.9	11.9
Rush	394	60.4	58.3	60.4	11.9	13.3	11.5	12.0	10.8	11.1
Russell	196	60.2	60.0	61.3	12.2	13.2	10.9	12.1	11.5	11.6
Saline	*	60.3	*	*	12.0	*	*	11.8	*	*
Central	**2,879**	**60.2**	**59.7**	**61.4**	**12.0**	**13.0**	**10.9**	**12.1**	**11.6**	**11.8**

WEIGHT, PROTEIN, AND MOISTURE

County and District	Samples Tested 2003 1/	Test Weight			Protein Content 2/			Moisture		
		Average 1992-01	2002	2003	Average 1992-01	2002	2003	Average 1992-01	2002	2003
Barber	116	60.0	60.1	62.3	11.8	12.3	10.9	11.8	12.0	11.9
Comanche	*	59.9	0.0	*	12.5	0.0	*	12.2	0.0	*
Edwards	57	60.6	60.7	61.3	12.4	13.8	12.4	12.1	12.1	11.7
Harper	14	59.2	0.0	61.6	11.9	0.0	10.6	11.9	0.0	12.1
Harvey	*	60.1	0.0	*	11.7	0.0	*	12.3	0.0	*
Kingman	323	60.8	59.5	62.4	11.5	12.9	10.5	12.0	12.1	11.9
Kiowa	33	60.2	60.3	61.7	12.5	13.4	11.9	12.3	12.6	13.1
Pawnee	1,066	60.0	59.5	60.6	12.5	13.6	12.2	12.0	11.8	11.6
Pratt	372	60.1	59.7	61.5	12.4	14.0	11.5	12.0	12.4	11.9
Reno	127	60.5	59.0	60.3	12.1	14.1	11.6	12.0	10.4	11.8
Sedgwick	188	60.3	61.2	60.9	11.8	11.5	11.1	11.9	11.8	12.3
Stafford	*	60.7	59.1	*	12.7	14.2	*	11.8	11.9	*
Sumner	174	59.4	59.3	59.0	11.8	12.5	11.3	11.9	12.3	12.5
South Central	**2,470**	**60.2**	**59.7**	**60.9**	**11.9**	**13.1**	**11.3**	**12.0**	**11.9**	**12.1**
Atchison	*	59.6	*	*	11.6	*	*	12.6	*	*
Brown	*	60.1	*	*	11.5	*	*	12.9	*	*
Doniphan	*	0.0	*	*	0.0	*	*	0.0	*	*
Jackson	*	0.0	*	*	0.0	*	*	0.0	*	*
Jefferson	*	0.0	*	*	0.0	*	*	0.0	*	*
Leavenworth	*	0.0	*	*	0.0	*	*	0.0	*	*
Marshall	6	59.7	63.6	62.6	11.5	11.3	10.9	12.7	11.5	11.7
Nemaha	*	59.4	*	*	11.7	*	*	13.0	*	*
Pottawatomie	*	60.8	*	*	11.5	*	*	12.0	*	*
Riley	*	0.0	*	*	0.0	*	*	0.0	*	*
Wyandotte	3	59.7	*	61.7	11.1	*	12.9	12.6	*	10.2
Northeast	**9**	**59.8**	**63.6**	**62.6**	**11.5**	**11.3**	**10.9**	**12.7**	**11.5**	**11.7**
Anderson	*	0.0	*	*	0.0	*	*	0.0	*	*
Chase	*	60.1	0.0	*	11.8	0.0	*	11.6	0.0	*
Coffey	*	60.0	0.0	*	10.8	0.0	*	12.6	0.0	*
Douglas	*	58.7	0.0	*	11.7	0.0	*	13.8	0.0	*
Franklin	20	60.1	60.7	60.6	11.0	11.0	10.3	12.2	11.7	12.4
Geary	*	0.0	*	*	0.0	*	*	0.0	*	*
Johnson	20	60.6	61.4	60.9	11.9	11.2	10.0	11.5	11.5	12.7
Linn	10	59.3	59.2	62.3	10.4	11.4	9.9	12.5	12.3	13.3
Lyon	*	0.0	*	*	0.0	*	*	0.0	*	*
Miami	*	0.0	*	*	0.0	*	*	0.0	*	*
Morris	*	59.9	0.0	*	11.5	0.0	*	12.7	0.0	*
Osage	*	60.1	0.0	*	11.5	0.0	*	13.1	0.0	*
Shawnee	1	60.4	0.0	60.0	11.7	0.0	12.3	12.5	0.0	10.3
Wabaunsee	*	0.0	*	*	0.0	*	*	0.0	*	*
East Central	**51**	**60.1**	**60.2**	**61.1**	**11.4**	**11.2**	**10.3**	**12.4**	**11.9**	**12.5**
Allen	68	59.6	59.7	60.4	10.1	11.1	9.9	12.8	12.4	13.2
Bourbon	*	0.0	*	*	0.0	*	*	0.0	*	*
Butler	*	58.9	*	*	11.5	0.0	*	12.5	0.0	*
Chautauqua	*	0.0	*	*	0.0	*	*	0.0	*	*
Cherokee	*	59.6	59.5	*	10.6	11.0	*	13.3	12.8	*
Cowley	167	59.5	59.8	59.2	11.3	11.6	10.8	12.1	12.1	12.6
Crawford	167	59.6	60.4	61.0	10.9	11.4	9.9	13.0	12.7	13.0
Elk	*	0.0	*	*	0.0	*	*	0.0	*	*
Greenwood	*	0.0	*	*	0.0	*	*	0.0	*	*
Labette	211	59.4	59.5	60.6	10.1	10.7	10.2	12.8	13.1	13.1
Montgomery	228	59.0	59.7	60.5	10.9	11.1	10.0	13.0	12.6	12.9
Neosho	290	59.4	59.0	60.4	11.0	11.5	10.1	13.0	12.5	13.0
Wilson	318	59.3	59.1	60.2	11.2	11.7	10.5	12.8	12.4	12.6
Woodson	*	0.0	*	*	0.0	*	*	0.0	*	*
Southeast	**1,449**	**59.2**	**59.6**	**60.1**	**11.1**	**11.3**	**10.3**	**12.7**	**12.5**	**12.8**
State	16,509	60.1	60.0	60.7	12.0	13.1	11.7	11.9	11.2	11.5

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 sample taken but included in district and State totals.

GRADES, DOCKAGE AND GRADE DEFECTS

Ninety-seven percent of the 2003 wheat carlots sampled averaged number 2 or better, compared with 96 percent for 2002. Wheat grading number 1, at 73 percent, was up 25 points from the 48 percent for 2002. Samples grading number 2, at 24 percent, were down 24 points from 48 percent for 2002. The northeast district of the State again had the highest average, with 100 percent of the samples grading number 1. The north central district was second with 91 percent of the samples grading number 1. The southwest had the lowest average grading number 1, with 56 percent. Ninety-three percent of all samples had less than 0.9 percent dockage, compared with 94 percent in 2002. Total defects, at 1.6 percent, were down from the 1.7 percent in 2002.

PERCENTAGE OF KANSAS WHEAT IN EACH GRADE

Year	District									State
	NW	WC	SW	NC	C	SC	NE	EC	SE	
					Grade No. 1					
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
					Grade No. 2					
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
					All Other Grades					
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	47	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

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
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

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										
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
Foreign Material										
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
Shrunken and Broken Kernels										
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
Total Defects 1/										
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

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

WHEAT GRADES AND DOCKAGE

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	51	49	0	0	0	0	0	35	65	0	0.0	0.5
Decatur	28	67	4	1	0	0	0	48	51	1	1.2	0.5
Graham	*	*	*	*	*	*	*	*	*	*	*	*
Norton	7	83	10	0	0	0	0	17	76	7	1.5	0.6
Rawlins	33	60	7	0	0	0	0	11	86	3	1.1	0.6
Sheridan	3	93	4	0	0	0	0	56	44	0	0.0	0.4
Sherman	35	64	1	0	0	0	0	3	60	37	1.2	0.9
Thomas	73	26	1	0	0	0	0	33	66	1	1.3	0.5
Northwest	**56**	**42**	**2**	**0**	**0**	**0**	**0**	**26**	**66**	**8**	**1.2**	**0.6**
Gove	89	11	0	0	0	0	0	53	41	6	1.4	0.5
Greeley	86	13	1	0	0	0	0	15	74	11	1.2	0.7
Lane	81	19	0	0	0	0	0	30	62	8	1.0	0.6
Logan	91	9	0	0	0	0	0	66	28	6	1.1	0.4
Ness	50	46	3	1	0	0	0	36	56	8	1.2	0.6
Scott	50	49	1	0	0	0	0	54	43	3	1.4	0.5
Trego	85	14	0	1	0	0	0	41	58	1	1.1	0.5
Wallace	94	6	0	0	0	0	0	2	79	19	1.2	0.8
Wichita	48	49	3	0	0	0	0	50	46	4	1.1	0.5
West Central	**71**	**28**	**1**	**0**	**0**	**0**	**0**	**40**	**54**	**6**	**1.2**	**0.6**
Clark	*	*	*	*	*	*	*	*	*	*	*	*
Finney	62	37	1	0	0	0	0	10	82	8	1.2	0.7
Ford	95	5	0	0	0	0	0	63	36	1	1.4	0.4
Grant	32	66	2	0	0	0	2	59	34	5	1.3	0.5
Gray	92	8	0	0	0	0	0	32	68	0	1.0	0.5
Hamilton	92	8	0	0	0	0	0	20	76	4	1.0	0.6
Haskell	100	0	0	0	0	0	0	68	32	0	0.0	*
Hodgeman	*	*	*	*	*	*	*	*	*	*	*	*
Kearny	*	*	*	*	*	*	*	*	*	*	*	*
Meade	75	25	0	0	0	0	0	72	27	1	1.0	0.4
Morton	19	81	0	0	0	0	0	77	23	0	0.0	0.4
Seward	76	24	0	0	0	0	0	41	56	3	1.5	0.5
Stanton	39	60	1	0	0	0	0	43	52	5	1.2	0.5
Stevens	85	15	0	0	0	0	0	46	54	0	0.0	0.5
Southwest	**75**	**25**	**0**	**0**	**0**	**0**	**0**	**43**	**54**	**3**	**1.2**	**0.5**
Clay	*	*	*	*	*	*	*	*	*	*	*	*
Cloud	97	3	0	0	0	0	0	89	10	1	1.5	0.3
Jewell	100	0	0	0	0	0	0	56	44	0	0.0	0.4
Mitchell	92	7	1	0	0	0	0	48	51	1	1.5	0.5
Osborne	81	19	0	0	0	0	0	35	64	1	1.1	0.5
Ottawa	*	*	*	*	*	*	*	*	*	*	*	*
Phillips	59	39	2	0	0	0	0	37	57	6	1.1	0.5
Republic	90	8	2	0	0	0	0	42	56	2	1.8	0.5
Rooks	*	*	*	*	*	*	*	*	*	*	*	*
Smith	98	2	0	0	0	0	0	73	27	0	0.0	0.4
Washington	*	*	*	*	*	*	*	*	*	*	*	*
North Central	**91**	**8**	**1**	**0**	**0**	**0**	**0**	**62**	**37**	**1**	**1.4**	**0.5**
Barton	90	10	0	0	0	0	0	54	41	5	1.2	0.5
Dickinson	44	51	5	0	0	0	0	40	58	2	1.3	0.5
Ellis	88	12	0	0	0	0	0	44	53	3	1.2	0.5
Ellsworth	97	3	0	0	0	0	0	49	46	5	1.6	0.5
Lincoln	93	5	1	1	0	0	0	59	37	4	2.3	0.5
McPherson	*	*	*	*	*	*	*	*	*	*	*	*
Marion	95	4	1	0	0	0	0	37	41	22	2.5	0.9
Rice	97	3	0	0	0	0	0	62	34	4	1.7	0.5
Rush	72	28	0	0	0	0	0	41	49	10	1.5	0.6
Russell	85	15	0	0	0	0	0	49	39	12	1.4	0.6
Saline	*	*	*	*	*	*	*	*	*	*	*	*
Central	**77**	**22**	**1**	**0**	**0**	**0**	**0**	**48**	**47**	**5**	**1.6**	**0.6**

WHEAT GRADES AND DOCKAGE

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	96	3	0	1	0	0	0	65	29	6	1.4	0.5
Comanche	*	*	*	*	*	*	*	*	*	*	*	*
Edwards	95	5	0	0	0	0	0	84	16	0	0.0	0.3
Harper	79	14	7	0	0	0	0	43	21	36	2.4	1.1
Harvey	*	*	*	*	*	*	*	*	*	*	*	*
Kingman	80	11	6	3	0	0	0	42	50	8	1.8	0.6
Kiowa	100	0	0	0	0	0	0	45	55	0	0.0	0.5
Pawnee	75	25	0	0	0	0	0	48	45	7	1.3	0.5
Pratt	96	3	1	0	0	0	0	43	49	8	1.7	0.6
Reno	66	31	3	0	0	0	0	22	68	10	2.0	0.7
Sedgwick	28	61	10	1	0	0	0	37	46	17	2.9	0.9
Stafford	*	*	*	*	*	*	*	*	*	*	*	*
Sumner	7	56	25	11	1	0	0	14	43	43	3.1	1.6
South Central	**65**	**27**	**6**	**2**	**0**	**0**	**0**	**39**	**47**	**14**	**2.3**	**0.9**
Atchison	*	*	*	*	*	*	*	*	*	*	*	*
Brown	*	*	*	*	*	*	*	*	*	*	*	*
Doniphan	*	*	*	*	*	*	*	*	*	*	*	*
Jackson	*	*	*	*	*	*	*	*	*	*	*	*
Jefferson	*	*	*	*	*	*	*	*	*	*	*	*
Leavenworth	*	*	*	*	*	*	*	*	*	*	*	*
Marshall	100	0	0	0	0	0	0	50	50	0	0.0	0.4
Nemaha	*	*	*	*	*	*	*	*	*	*	*	*
Pottawatomie	*	*	*	*	*	*	*	*	*	*	*	*
Riley	*	*	*	*	*	*	*	*	*	*	*	*
Wyandotte	67	33	0	0	0	0	0	67	0	33	2.3	1.0
Northeast	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**50**	**50**	**0**	**2.3**	**0.4**
Anderson	*	*	*	*	*	*	*	*	*	*	*	*
Chase	*	*	*	*	*	*	*	*	*	*	*	*
Coffey	*	*	*	*	*	*	*	*	*	*	*	*
Douglas	*	*	*	*	*	*	*	*	*	*	*	*
Franklin	75	25	0	0	0	0	0	40	60	0	0.0	0.5
Geary	*	*	*	*	*	*	*	*	*	*	*	*
Johnson	70	30	0	0	0	0	0	75	25	0	0.0	0.4
Linn	100	0	0	0	0	0	0	80	20	0	0.0	0.4
Lyon	*	*	*	*	*	*	*	*	*	*	*	*
Miami	*	*	*	*	*	*	*	*	*	*	*	*
Morris	*	*	*	*	*	*	*	*	*	*	*	*
Osage	*	*	*	*	*	*	*	*	*	*	*	*
Shawnee	100	0	0	0	0	0	0	100	0	0	0.0	0.3
Wabaunsee	*	*	*	*	*	*	*	*	*	*	*	*
East Central	**80**	**20**	**0**	**0**	**0**	**0**	**0**	**55**	**45**	**0**	**0.0**	**0.4**
Allen	61	35	4	0	0	0	0	4	77	19	1.2	0.8
Bourbon	*	*	*	*	*	*	*	*	*	*	*	*
Butler	*	*	*	*	*	*	*	*	*	*	*	*
Chautauqua	*	*	*	*	*	*	*	*	*	*	*	*
Cherokee	*	*	*	*	*	*	*	*	*	*	*	*
Cowley	17	74	9	0	0	0	0	9	31	60	2.9	2.0
Crawford	89	11	0	0	0	0	0	48	48	4	1.1	0.5
Elk	*	*	*	*	*	*	*	*	*	*	*	*
Greenwood	*	*	*	*	*	*	*	*	*	*	*	*
Labette	81	17	2	0	0	0	0	24	73	3	1.7	0.6
Montgomery	75	25	0	0	0	0	0	32	43	25	2.5	1.0
Neosho	64	34	2	0	0	0	0	14	82	4	1.9	0.7
Wilson	68	31	1	0	0	0	0	31	61	8	2.6	0.7
Woodson	*	*	*	*	*	*	*	*	*	*	*	*
Southeast	**60**	**37**	**3**	**0**	**0**	**0**	**0**	**23**	**56**	**21**	**2.2**	**1.1**
State	73	24	2	1	0	0	0	44	49	7	1.6	0.6

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

GRADE DEFECT PERCENTAGES

County and District	Samples Tested 2003 1/	Total Damaged Kernels			Foreign Material			Shrunken and Broken Kernels			Total Defects 2/		
		Average 1992-01	2002	2003	Average 1992-01	2002	2003	Average 1992-01	2002	2003	Average 1992-01	2002	2003
Cheyenne	37	0.1	0.0	0.1	0.0	0.0	0.0	2.0	2.8	1.6	2.2	2.8	1.6
Decatur	156	0.1	0.0	0.1	0.0	0.0	0.0	1.5	1.2	1.0	1.7	1.3	1.2
Graham	*	0.2	0.0	*	0.2	0.0	*	2.0	0.0	*	2.3	0.0	*
Norton	136	0.1	0.2	0.1	0.1	0.0	0.1	1.5	1.7	1.5	1.7	1.9	1.7
Rawlins	121	0.1	0.1	0.1	0.0	0.0	0.0	1.9	1.8	1.5	1.9	1.9	1.6
Sheridan	27	0.0	0.0	0.2	0.0	0.0	0.0	1.6	0.0	0.9	1.6	0.0	1.1
Sherman	301	0.0	0.0	0.1	0.0	0.0	0.0	1.8	1.9	1.5	1.8	2.0	1.6
Thomas	799	0.1	0.2	0.2	0.0	0.2	0.0	1.8	1.8	1.3	2.0	2.2	1.5
Northwest	**1,577**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**1.8**	**1.9**	**1.3**	**1.9**	**2.0**	**1.5**
Gove	275	0.1	0.2	0.2	0.0	0.0	0.0	1.7	1.4	1.1	1.8	1.5	1.3
Greeley	150	0.1	0.2	0.3	0.0	0.0	0.0	1.8	2.5	1.5	1.9	2.7	1.8
Lane	98	0.2	0.2	0.3	0.0	0.0	0.0	2.0	1.4	0.9	2.2	1.7	1.2
Logan	47	0.0	0.0	0.2	0.0	0.0	0.0	1.8	2.0	1.5	1.9	2.0	1.6
Ness	78	0.1	0.1	0.2	0.0	0.0	0.1	1.8	1.9	1.4	2.0	2.0	1.7
Scott	556	0.2	0.1	0.5	0.0	0.0	0.0	1.8	1.7	1.2	2.0	1.9	1.8
Trego	700	0.2	0.2	0.2	0.1	0.2	0.1	1.9	1.7	1.2	2.3	2.1	1.5
Wallace	385	0.1	0.0	0.2	0.0	0.0	0.0	1.8	0.0	1.3	1.9	0.0	1.4
Wichita	221	0.2	0.1	0.3	0.0	0.0	0.0	2.0	1.6	1.5	2.2	1.7	1.8
West Central	**2,610**	**0.1**	**0.1**	**0.3**	**0.0**	**0.0**	**0.0**	**1.9**	**1.8**	**1.3**	**2.0**	**2.0**	**1.6**
Clark	*	0.4	0.0	*	0.0	0.0	*	1.9	0.0	*	2.3	0.0	*
Finney	438	0.2	0.1	0.4	0.1	0.2	0.1	1.8	1.6	1.1	2.0	1.9	1.6
Ford	532	0.3	0.1	0.3	0.1	0.1	0.1	1.9	1.8	0.9	2.2	2.1	1.3
Grant	64	0.2	0.0	0.3	0.0	0.0	0.0	2.0	1.7	1.1	2.2	1.8	1.4
Gray	309	0.2	0.0	0.5	0.0	0.0	0.1	1.7	0.0	1.0	1.9	0.0	1.6
Hamilton	25	0.3	0.2	0.3	0.0	0.0	0.0	2.1	2.2	1.9	2.4	2.4	2.2
Haskell	28	0.3	0.0	0.2	0.0	0.0	0.0	1.7	0.0	0.7	2.0	0.0	0.9
Hodgeman	*	1.2	0.0	*	0.0	0.0	*	1.8	0.0	*	3.1	0.0	*
Kearny	*	0.1	0.1	*	0.1	0.0	*	1.4	1.4	*	1.6	1.5	*
Meade	232	0.3	0.2	0.3	0.1	0.1	0.0	1.6	1.2	0.8	2.0	1.5	1.1
Morton	88	0.3	0.2	0.3	0.0	0.1	0.0	2.1	2.0	1.0	2.3	2.2	1.3
Seward	34	0.2	0.1	0.3	0.1	0.0	0.0	1.8	1.3	1.1	2.1	1.4	1.4
Stanton	334	0.1	0.5	0.3	0.0	0.0	0.0	2.2	2.2	1.3	2.4	2.8	1.5
Stevens	26	0.2	0.0	0.3	0.0	0.0	0.0	1.9	0.0	0.7	2.1	0.0	1.0
Southwest	**2,110**	**0.3**	**0.2**	**0.3**	**0.0**	**0.1**	**0.0**	**1.8**	**1.7**	**1.1**	**2.1**	**2.0**	**1.4**
Clay	*	0.1	0.0	*	0.1	0.0	*	1.5	0.0	*	1.8	0.0	*
Cloud	1,318	0.3	0.3	0.4	0.3	0.1	0.2	1.9	1.2	1.2	2.5	1.6	1.8
Jewell	52	0.2	0.1	0.0	0.2	0.1	0.1	1.5	1.0	1.0	1.9	1.2	1.1
Mitchell	770	0.2	0.1	0.1	0.2	0.1	0.2	1.6	0.9	1.1	1.9	1.1	1.3
Osborne	423	0.2	0.1	0.1	0.1	0.1	0.1	1.6	0.9	1.3	2.0	1.1	1.5
Ottawa	*	0.0	0.3	*	0.4	0.4	*	1.5	1.2	*	2.0	1.8	*
Phillips	161	0.2	0.0	0.1	0.1	0.0	0.0	1.5	0.0	1.4	1.7	0.0	1.5
Republic	363	0.6	0.3	0.6	0.1	0.2	0.1	1.6	1.1	1.1	2.3	1.5	1.8
Rooks	*	0.1	0.1	*	0.1	0.0	*	1.5	1.4	*	1.7	1.6	*
Smith	267	0.2	0.1	0.0	0.1	0.1	0.0	1.3	0.9	1.1	1.6	1.1	1.1
Washington	*	0.7	0.0	*	0.1	0.0	*	1.5	0.0	*	2.3	0.0	*
North Central	**3,354**	**0.3**	**0.2**	**0.2**	**0.2**	**0.1**	**0.1**	**1.6**	**1.0**	**1.2**	**2.0**	**1.3**	**1.4**
Barton	504	0.3	0.1	0.2	0.2	0.2	0.1	1.6	0.9	1.0	2.0	1.2	1.3
Dickinson	698	0.2	0.3	1.5	0.1	0.2	0.2	1.4	1.2	1.4	1.8	1.6	3.1
Ellis	243	0.3	0.3	0.2	0.1	0.1	0.1	1.7	1.4	1.2	2.1	1.7	1.5
Ellsworth	79	0.2	0.2	0.3	0.1	0.1	0.2	1.5	1.0	1.1	1.9	1.3	1.6
Lincoln	246	0.2	0.1	0.1	0.2	0.1	0.1	1.8	1.1	1.2	2.1	1.3	1.4
McPherson	*	0.3	0.0	*	0.3	0.0	*	1.5	0.0	*	2.0	0.0	*
Marion	137	0.3	0.3	0.3	0.2	0.2	0.2	1.6	1.4	1.2	2.1	1.9	1.6
Rice	382	0.2	0.1	0.1	0.1	0.2	0.1	1.4	0.9	0.9	1.7	1.2	1.1
Rush	394	0.2	0.1	0.2	0.1	0.1	0.1	1.7	1.5	1.2	2.0	1.6	1.4
Russell	196	0.2	0.2	0.3	0.1	0.1	0.1	1.6	1.2	0.9	2.0	1.5	1.3
Saline	*	0.5	0.0	*	0.3	0.0	*	1.9	0.0	*	2.7	0.0	*
Central	**2,879**	**0.3**	**0.2**	**0.4**	**0.2**	**0.2**	**0.1**	**1.6**	**1.2**	**1.1**	**2.0**	**1.5**	**1.6**

GRADE DEFECT PERCENTAGES

County and District	Samples Tested 2003 1/	Total Damaged Kernels			Foreign Material			Shrunken and Broken Kernels			Total Defects 2/		
		Average 1992-01	2002	2003	Average 1992-01	2002	2003	Average 1992-01	2002	2003	Average 1992-01	2002	2003
Barber	116	0.2	0.2	0.1	0.1	0.1	0.2	1.8	1.3	1.2	2.1	1.6	1.5
Comanche	*	0.2	0.0	*	0.3	0.0	*	1.8	0.0	*	2.3	0.0	*
Edwards	57	0.3	0.1	0.1	0.0	0.1	0.0	1.5	0.8	1.1	1.9	0.9	1.2
Harper	14	0.2	0.0	0.0	0.4	0.0	0.4	2.1	0.0	0.8	2.6	0.0	1.2
Harvey	*	0.2	0.0	*	0.2	0.0	*	1.4	0.0	*	1.8	0.0	*
Kingman	323	0.2	0.1	0.0	0.3	0.2	0.3	1.5	0.9	1.3	2.0	1.2	1.7
Kiowa	33	0.3	0.9	0.1	0.1	0.2	0.1	1.5	1.2	0.7	1.9	2.3	0.9
Pawnee	1,066	0.2	0.3	0.2	0.1	0.1	0.1	1.8	1.0	0.9	2.1	1.4	1.1
Pratt	372	0.3	0.1	0.1	0.2	0.2	0.1	1.7	1.0	1.2	2.1	1.3	1.4
Reno	127	0.5	0.3	0.3	0.3	0.2	0.2	1.8	1.3	1.3	2.5	1.8	1.9
Sedgwick	188	0.6	1.1	1.4	0.2	0.3	0.2	1.8	1.8	1.5	2.7	3.1	3.1
Stafford	*	0.2	0.1	*	0.2	0.1	*	1.6	0.8	*	2.1	1.0	*
Sumner	174	0.2	0.5	0.2	0.2	0.2	0.6	1.9	1.2	1.5	2.4	1.9	2.4
South Central	**2,470**	**0.3**	**0.4**	**0.3**	**0.2**	**0.2**	**0.3**	**1.7**	**1.2**	**1.2**	**2.2**	**1.7**	**1.8**
Atchison	*	1.0	*	*	0.1	*	*	1.2	*	*	2.3	*	*
Brown	*	0.8	*	*	0.0	*	*	0.9	*	*	1.8	*	*
Doniphan	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Jackson	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Jefferson	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Leavenworth	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Marshall	6	0.7	0.1	0.2	0.1	0.0	0.0	1.2	0.8	0.7	1.9	1.0	0.9
Nemaha	*	1.1	*	*	0.1	*	*	1.4	*	*	2.7	*	*
Pottawatomie	*	0.4	*	*	0.0	*	*	1.4	*	*	1.8	*	*
Riley	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Wyandotte	3	1.4	*	0.3	0.1	*	0.1	1.3	*	1.8	2.7	*	2.2
Northeast	**9**	**0.9**	**0.1**	**0.2**	**0.1**	**0.0**	**0.0**	**1.2**	**0.8**	**0.7**	**2.1**	**0.9**	**0.9**
Anderson	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Chase	*	0.2	*	*	0.0	*	*	2.1	*	*	2.3	*	*
Coffey	*	0.4	*	*	0.1	*	*	1.0	*	*	1.5	*	*
Douglas	*	1.9	*	*	0.1	*	*	1.3	*	*	3.3	*	*
Franklin	20	0.4	0.8	0.9	0.0	0.1	0.1	0.9	0.8	0.6	1.3	1.6	1.5
Geary	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Johnson	20	0.9	0.3	1.0	0.1	0.1	0.1	2.3	2.4	0.7	3.3	2.8	1.7
Linn	10	0.7	0.9	0.9	0.1	0.1	0.1	0.7	1.0	0.6	1.4	2.0	1.6
Lyon	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Miami	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Morris	*	0.2	*	*	0.3	*	*	1.6	*	*	2.1	*	*
Osage	*	0.7	*	*	0.1	*	*	1.2	*	*	2.0	*	*
Shawnee	1	0.6	*	0.4	0.1	*	0.4	1.6	*	0.7	2.4	*	1.5
Wabaunsee	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
East Central	**51**	**0.7**	**0.8**	**0.9**	**0.1**	**0.1**	**0.1**	**1.4**	**1.1**	**0.6**	**2.2**	**1.9**	**1.6**
Allen	68	0.2	0.7	0.9	0.0	0.1	0.1	0.8	0.8	0.8	1.0	1.5	1.8
Bourbon	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Butler	*	0.2	*	*	0.2	*	*	1.5	*	*	1.9	*	*
Chautauqua	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Cherokee	*	1.2	0.4	*	0.1	0.0	*	1.0	1.1	*	2.2	1.5	*
Cowley	167	0.4	0.4	0.3	0.2	0.1	0.3	1.6	0.9	1.5	2.2	1.5	2.2
Crawford	167	1.6	0.6	1.1	0.1	0.1	0.1	1.0	0.7	0.8	2.7	1.4	2.0
Elk	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Greenwood	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Labette	211	0.5	0.2	0.8	0.1	0.1	0.1	1.1	1.1	1.2	1.7	1.4	2.1
Montgomery	228	1.0	0.2	0.5	0.1	0.1	0.1	1.3	1.0	1.1	2.4	1.3	1.7
Neosho	290	0.7	0.5	1.0	0.1	0.1	0.1	1.2	1.0	0.9	2.0	1.6	2.1
Wilson	318	0.8	0.4	0.8	0.1	0.1	0.1	1.3	1.2	1.2	2.2	1.8	2.1
Woodson	*	0.0	*	*	0.0	*	*	0.0	*	*	0.0	*	*
Southeast	**1,449**	**0.8**	**0.4**	**0.7**	**0.1**	**0.1**	**0.2**	**1.3**	**1.0**	**1.2**	**2.2**	**1.5**	**2.0**
State	16,509	0.3	0.2	0.3	0.1	0.1	0.1	1.7	1.4	1.2	2.1	1.7	1.6

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/ Percentages by defect may not add to total due to rounding. * Not published due to insufficient data or no sample taken, but included in district and State totals.

2003 KANSAS WHEAT VARIETIES

Jagger was the leading variety of wheat seeded in Kansas for the 2003 crop. Accounting for 45.2 percent of the State's wheat, Jagger increased 2.4 points from a year ago and was the most popular variety in seven of the nine districts. Jagger made the biggest gain in the South Central District. The KSU-maintained variety 2137 ranked second over all, with 13.3 percent of the acreage. It ranked first in one district and second in five. TAM 110 moved up to third position, and increased .8 points from last year. Karl and improved Karl moved down to fourth place with 3.2 percent of the acreage. The OSU-maintained variety 2174 moved down to fifth place with 3.1 percent of the State's acreage. TAM 107 held sixth place with 2.3 percent. Dominator moved up to seventh place, with 2.2 percent. Ike moved down to eighth place, with 2.1 percent. New to the top ten is Trego, a hard white, ranking ninth with 1.8 percent. KSU-maintained variety 2163 remained in the top ten with .8 percent. Acres planted with multiple varieties blended together were not included in the rankings by variety. Blends accounted for 12.8 percent of the acres planted State-wide and were used more extensively in the north central and central parts of the State. Out of the total State acres planted with blends, 98.6 percent had Jagger in the blend and 77.0 percent had 2137 in the blend. All Hard White varieties accounted for 2.7 percent of the State's acreage. Trego was the leading Hard White variety, accounting for 67 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, 1994-2003

Variety	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	PERCENT OF SEEDED ACREAGE									
Jagger	--	--	1.0	6.4	20.2	29.2	34.0	35.8	42.8	45.2
2137	--	--	--	1.0	13.5	22.0	23.1	22.3	15.5	13.3
TAM 110	--	--	--	--	--	0.5	1.3	2.8	3.0	3.8
Karl/Karl 92	23.6	22.4	20.9	22.1	10.8	5.9	3.5	3.3	3.6	3.2
2174	--	--	--	--	--	--	1.1	3.0	3.1	3.1
TAM 107	19.0	20.6	17.1	17.0	12.6	8.3	6.3	5.3	2.9	2.3
Dominator	--	--	--	--	0.2	0.8	1.4	1.5	2.0	2.2
Ike	--	0.9	7.2	10.5	7.0	5.5	4.1	3.6	2.6	2.1
Trego 1/	--	--	--	--	--	--	--	0.3	0.8	1.8
2163	13.8	17.1	19.8	15.4	10.4	3.4	2.3	2.0	1.3	0.8
Larned	8.3	7.6	4.8	3.6	2.4	1.9	1.2	1.0	0.9	0.8
Thunderbolt	--	--	--	--	--	--	--	0.2	0.6	0.8
Coronado	--	--	--	--	0.8	1.3	1.0	1.1	0.7	0.8
Stanton	--	--	--	--	--	--	--	--	0.1	0.6
T81	--	--	--	--	--	--	0.2	0.2	0.8	0.6
Vista	--	0.3	0.8	1.2	1.1	0.9	0.9	1.0	0.9	0.3
7853	2.1	3.7	4.6	4.0	3.4	1.9	1.5	0.9	0.4	0.3
NuFrontier 1/	--	--	--	--	--	--	--	--	0.1	0.3
NuHorizon 1/	--	--	--	--	--	--	--	--	--	0.2
Big Dawg	--	--	--	--	0.2	0.4	0.5	0.3	0.2	0.2
Scout/Scout66	1.3	1.0	1.2	0.8	0.7	0.5	0.3	0.1	0.2	0.2
Akron	--	--	--	--	0.4	0.8	1.0	0.4	0.4	0.2
Onaga	--	--	--	--	--	0.1	0.1	0.2	0.2	0.2
Ogallala	--	0.2	1.5	1.3	0.8	0.7	0.8	0.4	0.4	0.2
Lakin 1/	--	--	--	--	--	--	--	--	0.1	0.2
T83	--	--	--	--	--	--	0.1	0.2	0.1	0.2
Blends	--	--	--	--	2.6	6.1	7.5	7.0	11.5	12.8
Other Hard White Varieties	--	--	--	--	--	--	0.2	0.5	0.2	0.2
Other Hard Varieties	31.5	26.1	20.9	16.4	12.9	9.8	7.6	6.6	4.5	3.0
Other Soft Varieties	0.4	0.1	0.2	0.3	--	--	--	--	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE:* = Variety not reported in this district. 0=Less than .1 percent.
1/ Hard White Winter variety.