



OKLAHOMA SMALL GRAINS VARIETY PERFORMANCE TESTS 2005-2006



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This and other wheat-related publications can be
found at:

www.wheat.okstate.edu

2006 WHEAT CROP OVERVIEW

Production season

The 2005-2006 wheat production season will go down among the driest in recorded history for many areas of Oklahoma. There were a few late-summer/early-fall rains that allowed for emergence of early-September-sown wheat, and some areas of the state benefited from an early-October rainfall. The majority of the state, however, did not see significant rainfall again until April of 2006. As a result there were many acres of wheat sown in the fall of 2005 that did not emerge until the spring of 2006.

Those who sowed wheat in early September into adequate moisture conditions were generally pleasantly surprised by their forage production and cattle gains. Production in our wheat forage variety test sites, for example, were around 500 lb/ac below average, which was not bad considering the extreme drought conditions. Reports of cattle gains above 3 lb/hd/day were not uncommon and outstanding gains were probably the result of very few cold days and almost no damp/wet conditions during the winter of 05-06.

Although initial wheat forage production was adequate in many areas of Oklahoma, re-growth during and after grazing was almost nonexistent due to drought. Further, drought conditions inhibited root growth and plants were not “anchored” well at the time of grazing, which led to pulled plants and stand losses. As a result, dual-purpose wheat yields across the state were extremely low and there was great disparity between grain yield of grazed vs. nongrazed wheat.

Herbicide efficacy was generally much lower than normal. This was mostly due to drought-stressed weeds and a lack of activating rainfall. This frequently resulted

in weedy fields at harvest and prompted some growers to apply chemical harvest aids.

High nitrogen fertilizer prices, low yield potential and extreme drought meant that most producers were very conservative in top-dress nitrogen application rates. With all things considered this generally proved to be the right call, as response to supplemental nitrogen fertilizer was less than normal.

Spring freezes injured some wheat in low-lying areas of north-central and northeastern Oklahoma in March. Likewise, temperatures dipped below 32^o F in the Panhandle on April 26. Unfortunately this cold snap caught some fields just at flowering and greatly reduced the yield potential of some outstanding fields of irrigated wheat.

Harvest proceeded well ahead of schedule in 2006 and the majority of wheat was harvested by mid-June (approx. 1-2 weeks ahead of schedule). Harvested acreage was much lower than normal, with most acres west of I-35 and south of I-40 being abandoned prior to harvest. At the time of this report, the 2006 crop was estimated at 68.2 million bushels with an average yield of 22 bu/ac.

Pest problems

Drought certainly reduced yield potential of the 2005-2006 wheat crop, but it did not seem to have a significant effect on insect pests. Some newly-emerged wheat fields were lost and many others were sprayed for fall armyworm in September. Hessian fly was a widespread problem in north central Oklahoma, with some fields having infestation levels high enough to result in total crop loss.

Aphid numbers were generally not that high in the fall of 2005, but barley yellow dwarf virus symptoms were still widespread in the spring of 2006. In addition, many fields in central and southern Oklahoma had to be sprayed for greenbugs in the spring of 2006. Other insect problems included brown wheat mite and wheat head armyworm. Damage from these two insects, however, was not as widespread as that from Hessian fly and greenbugs.

High plains virus and wheat streak mosaic virus were both major problems in the Oklahoma Panhandle. These two viruses resulted in the destruction of several fields of irrigated wheat, and theories about the wheat curl mite over summering in conservation reserve program acres in the corners of pivots have producers in this region rethinking management strategies for these viruses.

Dryland root rot caused by the fungus *Fusarium* was another disease that caused significant losses in certain areas and fields of Oklahoma wheat this past season. In the late fall, fields infected with dryland root rot and common root rot (*Bipolaris*) were both found. However, the dry and hot conditions through the winter and spring greatly favored dryland root rot, and by early April fields severely infected with dryland root rot were observed across southwestern, central, west-central and to a lesser extent, northern Oklahoma. Many of these fields were abandoned or grazed-out.

Foliar diseases were generally not a major yield-limiting factor during the 2005-2006 wheat production season. There was some powdery mildew present on lower leaves of susceptible varieties, but infestations rarely made it up to the flag leaf. Leaf rust could be observed on some varieties later in the season, but disease incidence and severity

were generally below economic thresholds for control.

Methods

Locations. Just like farmers' fields, our variety trials suffered due to drought. Some locations such as Kildare, Okeene, and Frederick were dry at planting and never really had satisfactory emergence. Others, such as Olustee had satisfactory emergence but then perished due to drought. We lost our irrigated variety trial at Goodwell due to application errors and our nonirrigated trial at Goodwell due to a hail storm right after crop maturity.

Cultural Practices. We lost our no-till locations due to drought, so all harvested locations this year were conventionally tilled. We used a 6-inch row spacing and plots were eight rows wide and either 20 or 40 feet long. All plots received 50 lb/ac of 18-46-0 in-furrow at planting. The El Reno and Cherokee locations were sown at 120 lb/ac and all other locations were sown at 60 lb/ac. Grazing pressure, nitrogen fertilization, insect and weed control decisions were all made on a location-by-location basis and reflect standard management practices for the area.

Additional information on the Web

A copy of this publication as well as additional variety information and more information on wheat management can be found at

www.wheat.okstate.edu

Table 1. Fall forage production of winter wheat varieties sown in 2004 and 2005 at El Reno, OK.

Source	Variety	Year		2 -Year Average
		2004	2005	
-----lb/ac-----				
AgriPro	Fannin	2920 [†]	2700	2810
Oklahoma	Endurance	2840	2480	2660
Oklahoma	Deliver	2700	2550	2630
Oklahoma	Ok101	2580	2350	2470
AgriPro	Cutter	2860	2020	2440
Oklahoma	Custer	2410	2230	2320
Oklahoma	2174	2450	2130	2290
AgriPro	Jagalene	2380	2070	2230
Kansas	Jagger	2080	2320	2200
Kansas	Overley	2340	2020	2180
AgriPro	AP 502CL	2170	1880	2030
Mean		2480	2230	2390
LSD		430	590	370

[†] Shaded cells within a column are not statistically different from the highest-yielding variety within that column

Table 2. Fall forage production of winter wheat varieties sown in 2004 and 2005 at Perkins, OK.

Source	Variety	Year		2 -Year Average
		2004	2005	
-----lb/ac-----				
AgriPro	Fannin	3230 [†]	2690	2960
Oklahoma	Deliver	2730	2820	2780
AgriPro	Cutter	3000	2190	2600
Oklahoma	Endurance	2530	2650	2590
Oklahoma	Custer	2680	2460	2570
AgriPro	Jagalene	2710	2290	2500
Oklahoma	Ok101	2640	2330	2490
Oklahoma	2174	2230	2510	2370
AgriPro	AP 502CL	2460	2260	2360
Kansas	Overley	2080	2430	2260
Kansas	Jagger	2310	1940	2130
Mean		2600	2420	2510
LSD		460	260	290

[†] Shaded cells within a column are not statistically different from the highest-yielding variety within that column

*More information on fall forage production by wheat varieties can be found in OSU extension publication PT 2006-3 *Fall forage production by winter wheat varieties in Oklahoma*. To download a copy, visit www.wheat.okstate.edu

Wheat Variety Comparison Chart

Source	Entry	Lodging	First Hollow Stem	Maturity	High-temp sensitivity	Coleoptile Length	Acid Soil Tolerance	Hessian Fly	Septoria	Soil-borne Mosaic	Leaf Rust	Stripe Rust	Powdery Mildew	Tan Spot	Variety Protection
HARD RED WINTER WHEAT VARIETIES															
AgriPro	AP502 CL	3	VE	VE	2	1	4	S	3	3	4	4	1	2	P-94
AgriPro	Coronado	-	VE	VE	2	4	2	-	3	1	2	1	3	3	P-94
AgriPro	Cutter	4	VE	M	4	3	1	S	3	1	3	1	4	4	P-94
AgriPro	Dumas	1	E	E	2	4	4	S	3	4	3	-	3	1	P-94
AgriPro	Fannin	2	VE	VE	3	1	1	-	-	1	1	1	2	-	P-94
AgriPro	Jagalene	2	E	E	3	2	1	S	2	1	4	1	4	3	P-94
AgriPro	Longhorn	1	E	L	4	1	4	-	4	4	2	~	2	-	P
AgriPro	Ogallala	1	VE	M	3	3	3	-	2	4	3	~	3	-	P
AgriPro	Thunderbol	2	M	L	3	2	4	-	2	4	2	1	3	4	P
AgriPro	Tomahawk	2	L	VL	2	3	4	-	2	1	1	~	2	-	P
AGSECO	7853	3	VE	M	3	4	2	-	2	1	3	~	2	-	N
AGSECO	Onaga	2	E	E	1	3	3	PR	2	1	2	~	2	-	N
CSU	Above	3	VE	VE	2	2	4	-	3	4	4	3	1	2	P-94
KSU	Karl 92	3	E	E	2	4	3	-	2	1	4	-	1	~	P
KSU	2137	1	L	L	3	4	1	S	3	2	3	4	2	3	P-94
KSU	2145	2	E	E	2	2	3	PR	2	1	1	2	3	4	P-94
KSU	2163	2	E	E	1	3	1	-	4	1	2	-	1	-	P
KSU	2180	2	VE	VE	1	4	1	-	-	1	2	-	1	1	P
KSU	Ike	3	VL	L	2	2	4	PR	1	4	4	-	2	-	P-94
KSU	Jagger	3	VE	VE	3	2	1	S	1	1	4	1	4	2	P-94
KSU	Overley	2	VE	VE	4	3	2	S	2	1	2	1	4	2	A-94
NE	Scout 66	4	-	L	-	1	4	-	3	4	4	-	3	-	N
OSU	Triumph 64	4	L	M	4	1	4	-	4	4	4	-	3	1	N
OSU	2174	1	VL	L	4	3	3	-	2	1	2	2	1	4	P-94
OSU	Chisholm	2	L	E	3	3	3	-	3	4	4	1	3	4	N
OSU	Cimarron	3	-	E	4	4	3	-	-	4	4	-	3	-	N
OSU	Custer	2	E	E	1	3	4	-	3	4	3	4	1	3	N
OSU	Deliver	3	L	E	2	4	4	-	2	1	1	1	1	3	A-94
OSU	Endurance	2	VL	M	1	2	1	S	3	2	2	2	3	3	A-94
OSU	OK Bullet	1	E	E	1	4	1	S	2	2	2	2	3	3	A-94
OSU	Ok101	2	E	VE	1	4	1	S	3	2	3	2	4	4	N
OSU	Ok102	1	VL	L	4	1	3	S	3	1	2	4	2	4	N
OSU	Okfield	2	M	L	4	1	2	-	3	4	3	3	1	3	A-94
OSU	Tonkawa	1	M	E	2	3	4	-	3	1	1	-	1	-	N
TX	Lockett	4	E	VL	1	-	2	S	-	4	1	-	-	-	P-94
TX	TAM 107	3	E	M	3	2	4	-	3	4	4	-	1	-	P
TX	TAM 110	2	VE	VE	2	1	4	S	3	4	4	-	1	4	P-94
TX	TAM 111	3	M	L	3	1	3	PR	2	3	3	1	2	3	P-94
TX	TAM 200	4	E	E	1	3	2	-	1	4	3	-	1	-	N
TX	TAM 202	2	E	E	2	3	3	-	4	4	2	-	1	-	P
TX	TAM 301	4	E	E	-	-	-	-	-	4	1	-	-	-	P-94
TX	TAM 302	1	L	E	2	-	2	-	4	1	1	-	4	2	P-94
Westbred	Santa Fe	2	VE	E	-	2	2	S	-	1	1	2	-	2	A-94
HARD WHITE WHEAT VARIETIES															
AgriPro	Oro Blanco	-	VE	E	2	3	3	-	4	1	4	-	2	-	P-94
KSU	Betty	3	E	M	1	-	2	-	1	1	3	-	3	-	P-94
KSU	Danby	3	VL	L	-	3	-	-	4	4	4	1	4	-	A-94
KSU	Heyne	3	VE	M	1	-	1	-	2	1	1	-	2	-	P-94
KSU	Lakin	2	VL	M	1	4	-	-	4	2	4	-	4	3	P-94
KSU	Trego	4	L	M	2	3	4	S	3	2	1	4	2	4	P-94
OSU	Guymon	2	VE	L	1	4	3	-	2	1	1	3	4	3	A-94
OSU	Intrada	4	E	E	1	3	3	-	3	2	2	3	4	2	N

General:

 1 = Excellent
 4 = Poor

Maturity & First Hollow Stem

 VE = Very Early
 E = Early
 M = Medium
 L = Late
 VL = Latest

Coleoptile:

 1 = Longest
 4 = Shortest

Hessian Fly

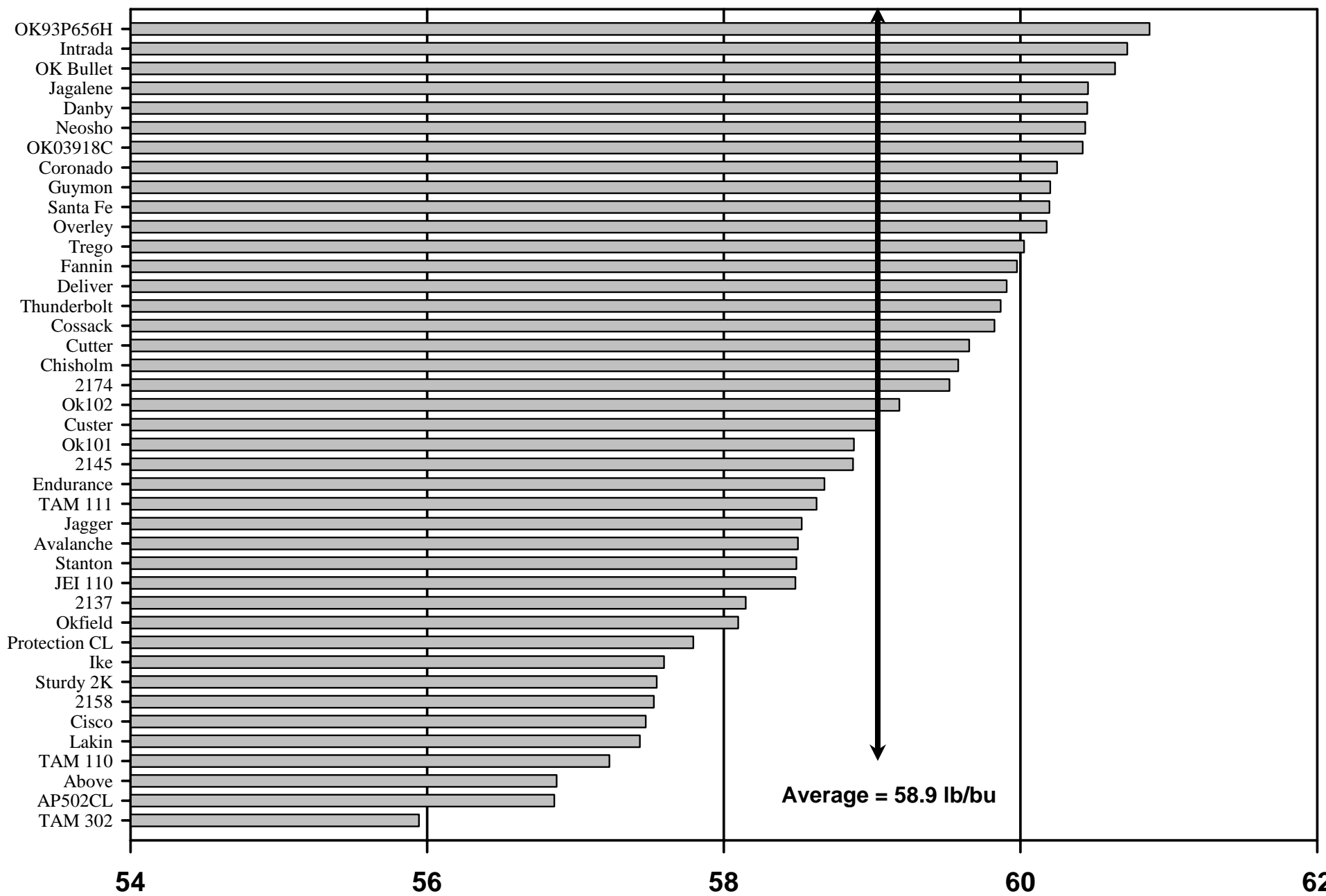
 S = Susceptible
 PR = Partially resistant
 R = Resistant

Variety Protection:

 N = Not protected, P + Protected PVPA - 1970
 P - 94 = Protected PVPA - 1994
 A-94 = PVPA - 1994 applied for

2006 Oklahoma Wheat Variety Trial Summary

	Grazed				Non-grazed													
	Cherokee	Elk City	El Reno	Gage	Alva	Apache	Apache fungicide	Balko	Buffalo	Haskell	Hooker	Kingfisher	Lahoma	Lahoma fungicide	Lamont	Marshall early-sown	Marshall late-sown	
	-----bu/ac-----																	
2145	-	-	-	-	-	-	-	-	-	47	-	-	-	-	-	-	-	
2174	5	30	34	11	24	25	29	14	26	39	-	27	55	56	33	23	31	
AP502CL	8	34	37	14	33	25	26	17	26	38	-	22	68	78	43	13	19	
Avalanche (W)	-	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	
Custer	-	29	34	8	25	26	27	15	24	-	-	21	-	-	-	14	9	
Cutter	10	36	39	15	27	33	36	20	29	46	-	36	70	74	46	26	35	
Danby (W)	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	
Deliver	3	28	39	12	23	27	29	13	26	37	31	22	57	62	36	17	16	
Endurance	5	31	36	13	24	32	31	13	27	49	35	30	72	69	37	24	34	
Fannin	4	30	26	8	26	24	25	13	19	36	-	22	61	65	40	15	26	
Guymon (W)	-	-	-	11	25	-	-	17	-	-	32	-	-	-	-	-	-	
Ike	-	-	-	-	-	-	-	17	-	-	-	-	-	-	-	-	-	
Intrada (W)	-	-	-	-	-	-	-	16	-	-	28	-	-	-	-	-	-	
Jagalene	15	36	41	13	30	37	35	19	31	44	34	28	70	76	50	23	36	
Jagger	20	35	39	12	31	34	33	17	31	44	34	35	67	72	52	23	35	
JEI 110	8	29	31	19	24	26	30	14	31	42	-	27	60	60	42	14	27	
Lakin (W)	-	-	-	-	-	-	-	14	-	-	-	-	-	-	-	-	-	
Neosho	5	-	-	-	-	-	-	-	-	35	-	-	67	70	35	-	-	
OK Bullet	10	40	44	19	29	35	35	20	27	47	38	29	73	73	48	32	31	
Ok101	7	28	35	17	24	27	32	15	-	37	-	27	67	66	39	26	28	
Okfield	8	32	40	12	27	26	27	18	27	42	-	29	60	62	39	20	27	
Overley	13	34	46	11	31	33	35	15	29	44	-	28	76	74	43	23	33	
Protection CL	11	-	-	-	-	-	-	-	-	34	-	-	70	73	44	-	-	
Santa Fe	10	35	36	13	28	31	33	16	24	43	-	31	69	68	49	21	35	
Stanton	-	-	-	-	-	-	-	17	-	-	-	-	-	-	-	-	-	
TAM 110	-	-	-	-	-	-	-	18	-	-	39	-	-	-	-	-	-	
TAM 111	-	27	42	15	28	27	27	20	28	-	30	20	-	-	-	18	15	
Trego (W)	-	-	-	-	-	-	-	20	-	-	35	-	-	-	-	-	-	
OK93P656H	8	33	40	12	27	28	31	19	31	51	-	21	75	73	50	27	36	
OK03918C	-	-	42	-	-	-	-	-	-	44	-	27	-	-	40	-	-	
OK03928C	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OK01307	15	33	42	-	28	28	35	15	31	48	-	32	68	71	47	31	40	
OK01310	2	30	-	-	-	-	-	-	21	-	-	-	-	-	-	-	-	
OK01420	9	32	35	-	30	-	-	-	-	-	-	28	76	73	49	-	-	
OK02405	7	30	34	-	-	29	28	-	-	-	-	-	-	-	-	-	-	
OK00224	11	28	-	-	25	26	29	-	-	-	-	-	-	-	45	-	-	
OK0522W	5	-	40	-	24	26	31	-	-	-	-	24	-	-	44	21	23	
OK00611W	7	-	41	-	28	27	28	-	-	-	-	20	-	-	43	24	18	
Mean	9	32	38	13	27	29	31	17	27	42	34	27	67	69	43	22	28	
LSD _(0.05)	4	3	10	4	4	6	4	4	11	7	4	6	8	6	6	9		



4-year average test weight (lb/bu) of wheat varieties in the OSU variety testing program

Alva Variety Trial

Cooperator: Wes Mallory

Management: Grain only

Soil type: Grant silt loam

Soil test information: pH = 6.1, P = 91, K = 704

Planting date: 10-13-05

Source	Variety	Grain Yield			Test Weight
		2005-06	2-Year	3-Year	2005-06
		-----bu/ac-----			---lb/bu---
AgriPro	AP502CL	33	42	45	61
Kansas	Jagger	31	40	42	61
Kansas	Overley	31	46	45	61
AgriPro	Jagalene	30	37	40	61
Oklahoma	OK Bullet	29	39	44	61
Westbred	Santa Fe	28	-	-	60
AgriPro	TAM 111	28	-	-	61
AgriPro	Cutter	27	38	42	61
Oklahoma	Okfield	27	38	41	60
AgriPro	Fannin	26	40	44	61
Oklahoma	Custer	25	33	36	60
Oklahoma	Guymon (W)	25	35	39	62
Oklahoma	2174	24	33	37	61
Oklahoma	Endurance	24	39	41	61
Johnstons	JEI 110	24	-	-	59
Oklahoma	Ok101	24	34	38	60
Oklahoma	Deliver	23	33	39	60
Experimentals					
	OK01420	30	-	-	61
	OK00611W (W)	28	-	-	60
	OK01307	28	-	-	61
	OK93P656H	27	37	-	62
	OK00224	25	-	-	61
	OK0522W (W)	24	-	-	60
Mean		27	38	41	61
LSD _(0.05)		4	5	4	1

(W) = Hard white wheat variety

Apache Variety Trial

Cooperator: Paul Jackson
 Soil type: Hollister silt loam
 Planting date: 10-17-05

Management: Grain only
 Soil test information: pH = 6.5, P = 50, K = 470.
 Fungicide = Stratego @ 10 oz/ac on April 3, 2006

Source	Variety	Grain Yield						Test Weight			
		2005-06			2-Year			3-Year*	2005-06		
		No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.	No Fungicide	No Fungicide	Fungicide	Diff.
		-----bu/ac-----						----lb/bu----			
AgriPro	Jagalene	37	35	-2	42	45	3	44	62	61	-1
Oklahoma	OK Bullet	35	35	0	44	45	1	44	61	61	0
Kansas	Jagger	34	33	-1	43	44	1	43	59	59	0
AgriPro	Cutter	33	36	3	42	45	3	44	61	61	0
Kansas	Overley	33	35	2	48	51	3	50	62	61	-1
Oklahoma	Endurance	32	31	-1	41	44	3	42	61	61	0
Westbred	Santa Fe	31	33	2	-	-	-	-	60	60	0
Oklahoma	Deliver	27	29	2	35	37	2	36	61	61	0
Oklahoma	Ok101	27	32	5	35	39	4	37	61	60	-1
AgriPro	TAM 111	27	27	0	-	-	-	-	62	62	0
Oklahoma	Custer	26	27	1	34	33	-1	34	61	61	0
Johnstons	JEI 110	26	30	4	-	-	-	-	59	59	0
Oklahoma	Okfield	26	27	1	35	37	2	36	61	61	0
Oklahoma	2174	25	29	4	33	38	5	35	61	62	1
AgriPro	AP502CL	25	26	1	33	37	4	35	57	57	0
AgriPro	Fannin	24	25	1	36	36	0	36	60	60	0
	Experimentals										
	OK02405	29	28	-1	-	-	-	-	60	60	0
	OK01307	28	35	7	41	47	6		61	61	0
	OK93P656H	28	31	3	-	-	-	-	61	61	0
	OK00611W	27	28	1	-	-	-	-	60	60	0
	OK00224	26	29	3	-	-	-	-	61	60	-1
	OK0522W	26	31	5	-	-	-	-	60	61	1
	Mean	29	31	2	39	41	3	40	61	60	0
	LSD (same variety + or - fung.)		5			4				1	
	LSD (any two varieties)		6			5				1	

* 2005 was the first year for the Apache fungicide trial, so there are no 3-year fungicide/no fungicide comparisons

Balko Variety Trial

Cooperator: Steve Frantz

Management: Grain only

Soil type: Ulysses-Richfield complex

Soil test information: pH = 8.1, P = 32, K = 836

Planting date: 10-03-05

Source	Variety	Grain Yield			Test Weight
		2005-06	2-Year	3-Year	2005-06
		-----bu/ac-----			-----lb/bu-----
Colorado	Avalanche (W)	22	26	21	60
AgriPro	Cutter	20	31	26	59
Kansas	Danby (W)	20	-	-	61
Oklahoma	OK Bullet	20	31	26	59
AgriPro	TAM 111	20	35	30	59
Kansas	Trego (W)	20	29	25	60
AgriPro	Jagalene	19	31	26	59
Oklahoma	Okfield	18	29	26	57
Texas	TAM 110	18	26	21	59
AgriPro	AP502CL	17	24	20	58
Oklahoma	Guymon (W)	17	28	24	60
Kansas	Ike	17	-	-	58
Kansas	Jagger	17	30	24	51
Kansas	Stanton	17	28	23	59
Oklahoma	Intrada (W)	16	26	22	61
Westbred	Santa Fe	16	-	-	58
Oklahoma	Custer	15	25	19	58
Oklahoma	Ok101	15	25		59
Kansas	Overley	15	29	24	59
Oklahoma	2174	14	24	21	57
Johnstons	JEI 110	14	-	-	56
Kansas	Lakin (W)	14	20	15	59
Oklahoma	Deliver	13	27	22	58
Oklahoma	Endurance	13	26	22	59
AgriPro	Fannin	13	27	19	58
Experimentals					
	OK93P656H	19	-	-	58
	OK01307	15	-	-	59
Mean		17	27	23	58
LSD _(0.05)		4	4	3	4

(W) = Hard white wheat variety

Buffalo Variety Trial

Cooperator: NRCS

Management: Grain only

Soil type: St. Paul silt loam

Soil test information: pH = 7.1, P = 71, K = 598

Planting date: 10-25-05

Source	Variety	Grain Yield			Test Weight
		2005-06	2-Year	3-Year	2005-06
		-----bu/ac-----			-----lb/bu-----
AgriPro	Jagalene	31	36	43	62
Kansas	Jagger	31	35	39	61
Johnstons	JEI 110	31	-	-	60
AgriPro	Cutter	29	35	42	61
Kansas	Overley	29	33	40	62
AgriPro	TAM 111	28	-	-	61
Oklahoma	Endurance	27	34	39	62
Oklahoma	OK Bullet	27	-	-	61
Oklahoma	Okfield	27	-	-	60
Oklahoma	2174	26	31	37	62
AgriPro	AP502CL	26	30	39	60
Oklahoma	Deliver	26	36	40	62
Oklahoma	Custer	24	26	32	61
Westbred	Santa Fe	24	-	-	61
AgriPro	Fannin	19	31	36	62
Experimentals					
	OK01307	31	-	-	61
	OK93P656H	31	-	-	62
	OK01310	21	-	-	60
Mean		27	33	39	61
LSD (0.05)		11	5	4	1

Cherokee Variety Trial

Cooperator: Kenneth Failes
Soil type: Dale silt loam
Planting date: 09-22-05

Management: Dual purpose
Grazing pressure: Heavy*
Soil test information: pH = 6.2, P = 53, K = 557

Source	Variety	Grain Yield			Test Weight
		2005-06**	2-Year	3-Year	2005-06
		-----bu/ac-----			-----lb/bu-----
Kansas	Jagger	20	36	41	59
AgriPro	Jagalene	15	29	37	60
Kansas	Overley	13	29	36	61
Agseco	ProtectionCL	11	-	-	59
AgriPro	Cutter	10	28	36	59
Oklahoma	OK Bullet	10	26	34	60
Westbred	Santa Fe	10	-	-	59
AgriPro	AP502CL	8	23	33	59
Johnstons	JEI 110	8	-	-	58
Oklahoma	Okfield	8	24	32	59
Oklahoma	Ok101	7	22	30	59
Oklahoma	2174	5	21	29	59
Oklahoma	Endurance	5	26	35	60
AgriPro	Neosho	5	-	-	60
AgriPro	Fannin	4	21	27	58
Oklahoma	Deliver	3	18	28	59
Experimentals					
	OK01307	15	-	-	59
	OK00224	11	-	-	60
	OK01420	9	-	-	59
	OK93P656H	8	-	-	60
	OK00611W	7	32	-	57
	OK02405	7	-	-	58
	OK0522W	5	-	-	58
	OK01310	2	-	-	60
Mean		9	26	33	59
LSD _(0.05)		4	4	3	***

* Plots were grazed from November 9, 2005 until February 26, 2006. An average of 118 lb/ac of beef weight gain was removed.

**Yields were reduced by brown wheat mite infestation in conjunction with severe drought

***Samples were too small to measure test weight on a plot-by-plot basis; therefore, all four replications were combined to measure test weight.

Elk City Variety Trial

Cooperator: Carl Simon	Management: Dual purpose
Soil type: Grandfield sandy loam	Grazing pressure: Light
Planting date: 10-18-05	Soil test information: pH = 5.1, P = 48, K = 320

Source	Variety	Grain Yield			Test Weight
		2005-06	2-Year	3-Year	2005-06
		----bu/ac----			----lb/bu----
Oklahoma	OK Bullet	40	44	45	62
AgriPro	Cutter	36	44	44	61
AgriPro	Jagalene	36	42	44	61
Kansas	Jagger	35	42	45	59
Westbred	Santa Fe	35	-	-	61
AgriPro	AP502CL	34	30	37	59
Kansas	Overley	34	41	44	61
Oklahoma	Okfield	32	36	39	60
Oklahoma	Endurance	31	36	39	59
Oklahoma	2174	30	26	31	61
AgriPro	Fannin	30	40	42	60
Oklahoma	Custer	29	26	33	60
Johnstons	JEI 110	29	-	-	58
Oklahoma	Deliver	28	37	41	60
Oklahoma	Ok101	28	29	34	59
AgriPro	TAM 111	27	-	-	61
Experimentals					
	OK01307	33	42	-	61
	OK93P656H	33	-	-	60
	OK01420	32	-	-	60
	OK01310	30	-	-	60
	OK02405	30	-	-	59
	OK00224	28	-	-	60
	Mean	32	37	40	60
	LSD _(0.05)	3	6	5	1

EI Reno Variety Trial

Cooperator: Bornemann Farms

Management: Dual purpose

Soil type: Pond creek silt loam

Grazing pressure: Heavy*

Planting date: 09-20-05

Soil test information: pH = 5.5, P = 106, K = 328

Source	Variety	Grain Yield		Test Weight
		2005-06	2-Year	2005-06
		----bu/ac----		--lb/bu--
Kansas	Overley	46	47	63
Oklahoma	OK Bullet	44	48	63
AgriPro	TAM 111	42	-	63
AgriPro	Jagalene	41	41	63
Oklahoma	Okfield	40	45	62
AgriPro	Cutter	39	43	63
Oklahoma	Deliver	39	45	63
Kansas	Jagger	39	42	61
AgriPro	AP502CL	37	43	60
Oklahoma	Endurance	36	45	61
Westbred	Santa Fe	36	-	63
Oklahoma	Ok101	35	40	62
Oklahoma	2174	34	38	63
Oklahoma	Custer	34	37	62
Johnstons	JEI 110	31	-	60
AgriPro	Fannin	26	35	63
Experimentals				
	OK01307	42	52	63
	OK03918C	42	-	62
	OK00611W	41	-	62
	OK0522W	40	-	62
	OK93P656H	40	45	63
	OK01420	35	-	62
	OK02405	34	-	61
	OK03928C	32	-	63
Mean		38	43	62
LSD _(0.05)		10	6	1

* Plots were in a 129 acre field that was grazed from November 10, 2005 to February 10, 2006. Stocking rate was 92 head (1.4 acres per calf) with an average daily gain of 2.75 lbs/hd, which equates to 180 lb/ac of beef weight gain removed.

Gage Variety Trial

Cooperator: Curtis Torrance	Management: Dual Purpose*
Soil type: St. Paul silt loam	Grazing pressure: Light
Planting date: 09-28-05	Soil test information: pH = 7.4, P = 222, K = 730

Source	Variety	Grain Yield			Test Weight
		2005-06	2-Year*	3-Year*	2005-06
		-----bu/ac-----			-----lb/bu-----
Oklahoma	OK Bullet	19	37	-	60
Johnstons	JEI 110	19	-	-	60
Oklahoma	Ok101	17	30	30	60
AgriPro	Cutter	15	35	39	60
AgriPro	TAM 111	15	35	36	59
AgriPro	AP502CL	14	28	32	59
Oklahoma	Endurance	13	33	34	60
AgriPro	Jagalene	13	32	36	60
Westbred	Santa Fe	13	-	-	59
Oklahoma	Deliver	12	29	31	60
Kansas	Jagger	12	32	33	59
Oklahoma	Okfield	12	30	-	58
Oklahoma	2174	11	25	26	60
Oklahoma	Guymon (W)	11	-	-	59
Kansas	Overley	11	34	32	60
Oklahoma	Custer	8	25	28	59
AgriPro	Fannin	8	28	29	59
	Experimentals				
	OK93P656H	12	-	-	59
	Mean	13	30	32	59
	LSD _(0.05)	4	6	5	N.S.**

* Plots were not grazed in the 2004-05 crop year

*N.S. = differences in test weight were nonsignificant at the $P = 0.05$ level.

Haskell Variety Trial

Cooperator: Eastern Research Station

Management: Grain only

Soil type: Taloka silt loam

Soil test information: pH = 6.6, P = 182, K = 494

Planting date: 10-10-05

Source	Variety	Grain Yield			Test Weight
		2005-06	2-Year	3-Year	2005-06
		-----bu/ac-----			-----lb/bu-----
Oklahoma	Endurance	49	57	55	60
Kansas	2145	47	60	54	62
Oklahoma	OK Bullet	47	-	-	62
AgriPro	Cutter	46	50	48	62
AgriPro	Jagalene	44	52	50	61
Kansas	Jagger	44	39	39	59
Kansas	Overley	44	34	34	61
Westbred	Santa Fe	43	-	-	60
Johnstons	JEI 110	42	-	-	59
Oklahoma	Okfield	42	-	-	60
Oklahoma	2174	39	49	48	62
AgriPro	AP502CL	38	46	47	57
Oklahoma	Deliver	37	42	44	60
Oklahoma	Ok101	37	45	44	59
AgriPro	Fannin	36	50	50	58
AgriPro	Neosho	35	-	-	59
Agseco	ProtectionCL	34	-	-	57
Experimentals					
	OK93P656H	51	-	-	61
	OK01307	48	-	-	60
	OK03918C	44	-	-	60
Mean		42	46	46	60
LSD _(0.05)		7	9	6	1

*Overley and Jagger sustained significant bird damage (greater than 50%) prior to harvest in 2004 and 2005

Hooker Variety Trial

Cooperator: Tom Arnold

Management: Grain only

Soil type: Dalhart fine sandy loam

Soil test information: pH = 6.9, P = 51, K = 1032

Planting date: 09-27-05

Source	Variety	Grain Yield	Test Weight
		2005-06	2005-06
		-----bu/ac-----	-----lb/bu-----
Texas	TAM 110	39	58
Oklahoma	OK Bullet	38	59
Oklahoma	Endurance	35	58
Kansas	Trego (W)	35	59
AgriPro	Jagalene	34	59
Kansas	Jagger	34	58
Oklahoma	Guymon (W)	32	60
Oklahoma	Deliver	31	58
AgriPro	TAM 111	30	57
Oklahoma	Intrada (W)	28	61
Mean		34	59
LSD _(0.05)		4	1

(W) = Hard white wheat variety

Kingfisher Variety Trial

Cooperator: Rodney Mueggenborg

Management: Grain only

Soil type: Renfro clay loam

Soil test information: pH = 6.8, P = 49, K = 559

Planting date: 10-14-05

Source	Variety	Grain Yield			Test Weight
		2005-06	2-Year	3-Year	2005-06
		-----bu/ac-----			-----lb/bu-----
AgriPro	Cutter	36	44	46	62
Kansas	Jagger	35	44	50	61
Westbred	Santa Fe	31	-	-	62
Oklahoma	Endurance	30	41	46	62
Oklahoma	OK Bullet	29	-	-	62
Oklahoma	Okfield	29	-	-	61
AgriPro	Jagalene	28	40	46	62
Kansas	Overley	28	41	43	62
Oklahoma	2174	27	34	37	62
Johnstons	JEI 110	27	-	-	60
Oklahoma	Ok101	27	36	40	62
AgriPro	AP502CL	22	38	45	59
Oklahoma	Deliver	22	32	37	62
AgriPro	Fannin	22	36	41	63
Oklahoma	Custer	21	31	38	61
AgriPro	TAM 111	20	-	-	61
Experimentals					
	OK01307	32	-	-	62
	OK01420	28	-	-	61
	OK03918C	27	-	-	61
	OK0522W	24	-	-	60
	OK93P656H	21	-	-	62
	OK00611W	20	-	-	60
Mean		27	38	43	61
LSD _(0.05)		6	4	5	1

Lahoma Variety Trial

Cooperator: North Central Research Station

Management: Grain only

Soil type: Pond creek silt loam

Soil test information: pH = 6.3, P = 68, K = 492

Planting date: 10-11-05

Fungicide = Quilt @ 14 oz/ac on April 8, 2006

Source	Variety	Grain Yield									Test Weight		
		2005-06			2-Year			3-Year			2005-06		
		No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.	No Fungicide	Fungicide	Diff.
		-----bu/ac-----									-----lb/bu-----		
Kansas	Overley	76	74	-2	70	69	-1	70	70	0	62	62	0
Oklahoma	OK Bullet	73	73	0	66	69	3	65	69	4	61	62	1
Oklahoma	Endurance	72	69	-3	64	65	1	56	61	5	61	61	0
AgriPro	Cutter	70	74	4	62	68	6	54	58	4	61	62	1
AgriPro	Jagalene	70	76	6	66	71	5	59	63	4	62	62	0
Agseco	ProtectionCL	70	73	3	-	-	-	-	-	-	58	59	1
Westbred	Santa Fe	69	68	-1	-	-	-	-	-	-	61	61	0
AgriPro	AP502CL	68	78	10	53	69	16	52	69	17	58	60	2
Kansas	Jagger	67	72	5	62	69	7	63	70	7	60	60	0
AgriPro	Neosho	67	70	3	-	-	-	-	-	-	61	62	1
Oklahoma	Ok101	67	66	-1	55	63	8	53	62	9	61	61	0
AgriPro	Fannin	61	65	4	60	65	5	63	65	2	61	62	1
Johnstons	JEI 110	60	60	0	-	-	-	-	-	-	58	58	0
Oklahoma	Okfield	60	62	2	54	59	5	53	58	5	60	60	0
Oklahoma	Deliver	57	62	5	56	61	5	58	66	8	61	61	0
Oklahoma	2174	55	56	1	48	55	7	52	58	6	60	60	0
	Experimentals												
	OK01420	76	73	-3	-	-	-	-	-	-	61	61	0
	OK93P656H	75	73	-2	-	-	-	-	-	-	62	62	0
	OK01307	68	71	3	-	-	-	-	-	-	61	61	0
Mean		67	69	2	60	65	6	58	64	6	61	61	0
LSD (same variety + or - fung.)		7			5			5			1		
LSD (any two varieties)		8			6			6			1		

Lamont Variety Trial

Cooperator: Kirby Farms

Management: Grain only

Soil type: Pond creek silt loam

Soil test information: pH = 5.8, P = 65, K = 544

Planting date: 09-30-05

Source	Variety	Grain Yield		Test Weight
		2005-06	2-Year*	2005-06
		-----bu/ac-----		-----lb/bu-----
Kansas	Jagger	52	48	59
AgriPro	Jagalene	50	48	59
Westbred	Santa Fe	49	-	57
Oklahoma	OK Bullet	48	49	59
AgriPro	Cutter	46	41	59
Agseco	ProtectionCL	44	-	57
AgriPro	AP502CL	43	45	58
Kansas	Overley	43	50	58
Johnstons	JEI 110	42	-	57
AgriPro	Fannin	40	48	60
Oklahoma	Ok101	39	45	57
Oklahoma	Okfield	39	41	58
Oklahoma	Endurance	37	42	59
Oklahoma	Deliver	36	46	59
AgriPro	Neosho	35	-	59
Oklahoma	2174	33	40	59
Experimentals				
	OK93P656H	50	-	59
	OK01420	49	-	58
	OK01307	47	-	59
	OK00224	45	-	58
	OK0522W	44	-	58
	OK00611W	43	-	58
	OK03918C	40	-	59
Mean		43	45	58
LSD (0.05)		6	7	1

*Variety trial was not harvested in 2004-05, so the two year average is the average of the 2005-06 and 2003-04 crop years

Marshall Variety Trial

Cooperator: Henry Fuxa

Management: Grain only and Dual purpose

Soil type: Kirkland silt loam

Soil test information: pH = 5.1, P = 45, K = 269

Planting date: Early-sown = 09-07-06; Late-sown =10-14-06

Source	Variety	Grain Yield									Test Weight
		2005-06*			2-Year			3-Year			2005-06
		Early-sown	Late-sown	Diff.	Grazed	Non-grazed	Diff.	Grazed	Non-grazed	Diff.	Late-sown
		-----bu/ac-----									--lb/bu---
Oklahoma	OK Bullet	32	31	-1	29	33	4	35	41	6	61
AgriPro	Cutter	26	35	9	20	33	13	25	40	15	60
Oklahoma	Ok101	26	28	2	19	27	8	26	33	7	59
Oklahoma	Endurance	24	34	10	18	32	14	29	39	10	59
Oklahoma	2174	23	31	8	18	31	13	28	38	10	61
AgriPro	Jagalene	23	36	13	20	31	11	29	40	11	60
Kansas	Jagger	23	35	12	17	33	16	23	40	17	60
Kansas	Overley	23	33	10	19	39	20	28	47	19	60
Westbred	Santa Fe	21	35	14	-	-	-	-	-	-	60
Oklahoma	Okfield	20	27	7	17	28	11	26	36	10	61
AgriPro	TAM 111	18	15	-3	-	-	-	-	-	-	61
Oklahoma	Deliver	17	16	-1	17	30	13	28	38	10	60
AgriPro	Fannin	15	26	11	13	29	16	19	37	18	60
Oklahoma	Custer	14	9	-5	15	19	4	27	32	5	60
Johnstons	JEI 110	14	27	13	-	-	-	-	-	-	59
AgriPro	AP502CL	13	19	6	15	19	4	24	29	5	60
	Experimentals										
	OK01307	31	40	9	-	-	-	-	-	-	61
	OK93P656H	27	36	9	24	37	13	-	-	-	61
	OK00611W	24	18	-6	-	-	-	-	-	-	59
	OK0522W	21	23	2	-	-	-	-	-	-	60
	Mean	22	28	6	19	30	11	27	38	11	60
	LSD for any two means within the same year	9			7			5			1

* Due to insect damage and overall poor growth, the early-sown (normally dual-purpose) plots were not grazed in 2005-06.

Plant height, lodging score, and heading date for selected variety trials in Oklahoma in 2006

Variety	Plant Height					Lodging	Heading date		
	Balko	Buffalo	Hooker	Kingfisher	Lahoma	Haskell	Lahoma	Stillwater early-sown	Stillwater late-sown
	-----inches-----					0 - 10 scale*			
2145	-	-	-	-	-	1	-	4/13	4/14
2174	17	48	-	52	76	0	4/20	4/14	4/14
AP 502CL	16	48	-	52	67	5	4/15	4/7	4/10
Avalanche (W)	16	-	-	-	-	-	-	4/13	4/15
Custer	17	51	-	55	-	-	-	4/10	4/13
Cutter	18	57	-	58	75	2	4/18	4/12	4/14
Danby (W)	17	-	-	-	-	-	-	4/11	4/15
Deliver	19	52	23	54	73	2	4/19	4/11	4/14
Endurance	17	51	21	53	69	2	4/19	4/12	4/14
Fannin	17	51	-	54	72	3	4/18	4/8	4/11
Guymon (W)	16	-	22	-	-	-	-	4/14	4/15
Ike	17	-	-	-	-	-	-	4/14	4/16
Intrada (W)	18	-	21	-	-	-	-	4/11	4/14
Jagalene	17	51	24	51	75	2	4/18	4/10	4/13
Jagger	17	51	22	53	70	2	4/16	4/9	4/13
JEI 110	17	48	-	51	62	1	4/19	4/12	4/14
Lakin (W)	17	-	-	-	-	-	-	4/11	4/13
Neosho	-	-	-	-	71	0	4/17	4/11	4/13
OK Bullet	18	50	23	54	81	1	4/19	4/13	4/14
Ok101	17	-	-	56	70	2	4/17	4/11	4/13
Okfield	17	50	-	58	75	1	4/19	4/13	4/15
Overley	18	51	-	56	76	1	4/16	4/12	4/13
ProtectionCL	-	-	-	-	75	3	4/15	4/6	4/11
Santa Fe	16	46	-	53	70	2	4/17	4/9	4/12
Stanton	17	-	-	-	-	-	-	4/13	4/14
TAM 110	16	-	21	-	-	-	-	4/7	4/10
TAM 111	20	51	24	59	-	-	-	4/11	4/14
Trego (W)	16	-	22	-	-	-	-	4/12	4/14
OK93P656H	17	51	-	55	75	1	4/19	4/12	4/14
OK03918C	-	-	-	55	-	2	-	4/11	4/13
OK03928C	-	-	-	-	-	-	-	4/10	4/12
OK00224	-	-	-	-	-	-	-	4/10	4/11
OK01307	17	51	-	52	72	1	4/18	4/12	4/14
OK01310	-	47	-	-	-	-	-	4/14	4/18
OK01420	-	-	-	54	75	-	4/16	4/9	4/11
OK02405	-	-	-	-	-	-	-	4/13	4/15
OK0522W	-	-	-	51	-	-	-	4/11	4/13
OK00611W	-	-	-	53	-	-	-	4/13	4/14

* Scale of 0-10 with 0 representing no lodging and 10 representing 100% lodging