

10. Custom Rates Survey Preliminary Results

Leah Tsoodle

<ltsoodle@ksu.edu>

Dr. Leah J. Tsoodle is the director of the Land Use Value Project and an assistant professor in the Department of Agricultural Economics, Kansas State University. Leah received her PhD from Kansas State in 2005. She works with both undergraduate and graduate students and conducts research in the areas of land values, land rental rates, and rural development. Leah also maintains a varied outreach program designed to disseminate her research information to various stakeholders in Kansas land markets and economic development groups for rural communities.

Abstract/Summary

With the rising cost of machinery and the uncertainty of local labor, custom agricultural work has become a staple for today's agricultural operations. Kansas farmers, ranchers, and custom service businesses need to know the current custom rates in Kansas to make good decisions. The 2016 Custom Rates Survey is designed to gather and distribute this information. This survey is conducted by the Agricultural Land Use Survey Center; the survey personnel compile and summarize the data from custom service providers from across the state. Information gathered includes the prices for many practices, such as hauling and harvesting crops, silage, haying and baling, tillage, planting and seed cleaning, fertilizer and pesticide applications and costs, feed preparation and delivery, manure removal and machine rental, and livestock and fence building. This session will provide a look at the preliminary results of the 2016 Kansas Custom Rates Survey and a comparison to the 2013 rates.

2016 Kansas Custom Rates Survey Preliminary Results

Leah J. Tsoodle and Xianghong Li

Risk and Profit Conference—August 18-19, 2016

Custom Rate Data are Important

- Custom agricultural work is a staple for modern farms
- Knowing competitive prices helps agricultural industry stay competitive

Custom Rates Survey

- Conducted annually until 2009
- Conducted in 2013 again
- Current survey of 2016 custom rates
- Custom Rates Survey will be conducted every other year

2016 Kansas Custom Rates Survey

- Conducted by Agricultural Land Use Survey Center – joint efforts of KDA and KSU
- Survey invitations were out in mid-May
- Reminders were out in early July and mid-August
- Available online at www.tinyurl.com/2016customrates

2016 Kansas Custom Rates Survey

Collect information on:

- Harvesting and hauling grains and oilseeds,
- Haying and baling,
- Silage chopping and hauling,
- Fertilizer and pesticide applications
- Tillage, planting, and seed cleaning
- Feed preparation and delivery
- Manure removal and machine rental

2016 Kansas Custom Rates Survey

Custom rates, as defined in the survey,

- include the cost of the machinery, fuel, fuel surcharges, and operator
- exclude other materials unless otherwise specified
- exchange work between farmers not considered as custom work.



The purpose of this survey is to collect information on charges for custom practices, feed preparation, and machinery rental. Custom operations are a critical component of Kansas agriculture and contribute significantly to success in the crop and livestock industries. We need your assistance in updating the data.

Please answer any portion of this questionnaire where you have knowledge of custom rates charged in your area during 2015-2016. Custom rates should include the cost of the machinery, fuel, fuel surcharges, and operator, but should exclude other materials unless otherwise specified. **Do not consider exchange work between farmers as custom work.** We need your response, even if you can answer only one or two of the questions.

Response to this survey is voluntary, and your response will be kept confidential. Please return the printed survey with your response in the stamped self-addressed envelope that is enclosed. If you have any questions regarding the survey, please do not hesitate to contact me at 785-532-1517 or Itsoodle@ksu.edu. Any additional comments you may have about this survey would be highly appreciated.

Respectfully,
Leah J. Tsoodle
Director, Agricultural Land Use Survey Center

Please enter your classification number below (classification number is a 4-digit number starting with CR printed above your name on the postcard).

CR

Did you provide any type of custom service in 2015-2016? YES NO

If yes, what type of service(s)? _____

Did you have any custom work performed on your farm in 2015-2016? YES NO

If both questions 1 and 2 = NO, go to Section O on Page 6.

Please list the counties where you provide custom services or pay for custom work for your operation:

	County 1	County 2	County 3	County 4
County				

HARVESTING CROPS (INCLUDE charge for Machinery, Fuel, and Labor, but EXCLUDE hauling charges.)

Crop	Flat-Rate		Base Rate with Extra Charge for High Yield (if any)		
	\$/Acre	\$/Bushel	Base Rate \$/Acre	\$/Bushel	Extra Charge Above XXX Bushels/Acre
Wheat					
Sorghum					
Soybeans					
Corn					
Cotton		\$ /lint lb.		\$ /lint lb.	lint lb.
Sunflower		\$ /cwt		\$ /cwt	cwt

- List crops from above that you were NOT able to separate hauling charges:
- If you do custom crop HARVESTING, circle the areas of the state in which you work:

2016 Custom Rates Survey Sample

- Sampled 4106 across Kansas
- To date, received about 150 responses, among which 116 provided information

	Number of Responses		Percentage	
	Yes	No	Yes	No
Provide custom service	103	13	88.79%	11.21%
Have custom work performed on the farm	63	53	54.31%	45.69%

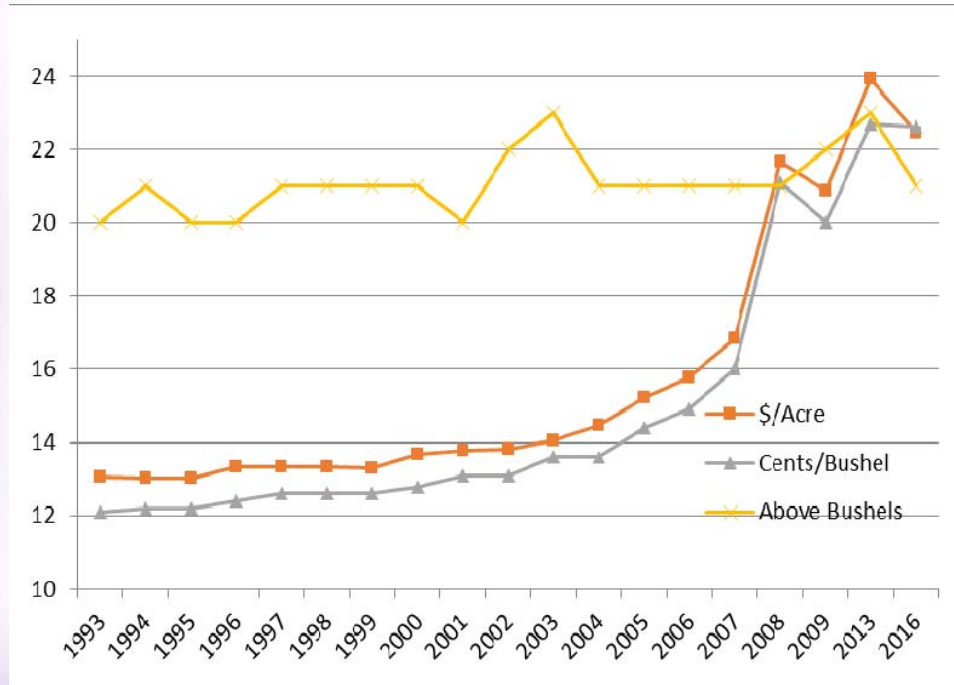
Custom Rates for Harvesting Crops

	Base Rate with Extra Charge for High Yield			
	Base Rate (\$/Acre)		Extra Charge for High Yield	
	Range	Average	Cents/Bushel	Above Bushels
2016				
Wheat	16.00-26.00	22.46	22.61	21
Sorghum	16.00-35.00	23.60	23.08	43
Soybeans	18.00-30.00	25.00	22.50	26
Corn	15.00-30.00	24.56	22.50	63
2013				
Wheat	14.00-45.00	23.93	22.70	23
Sorghum	10.00-40.00	24.33	23.00	35
Soybeans	12.00-45.00	28.78	23.20	27
Corn	16.00-85.00	30.02	21.70	71

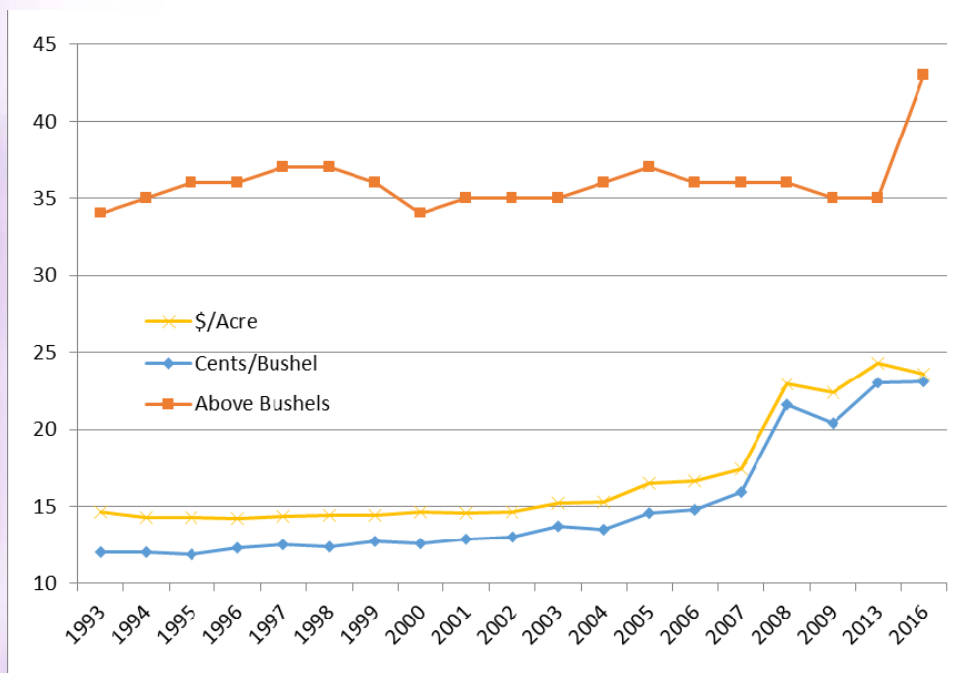
Custom Rates for Harvesting Crops

Crop	Flat Rate (\$/Acre)		
	# of Reports	Range	Average
Wheat	15	21-30	25.27
Sorghum	5	25-35	29.40
Soybeans	16	25-39	30.04
Corn	11	25-60	30.65
Sunflower (\$/cwt)	2	30-45	37.50

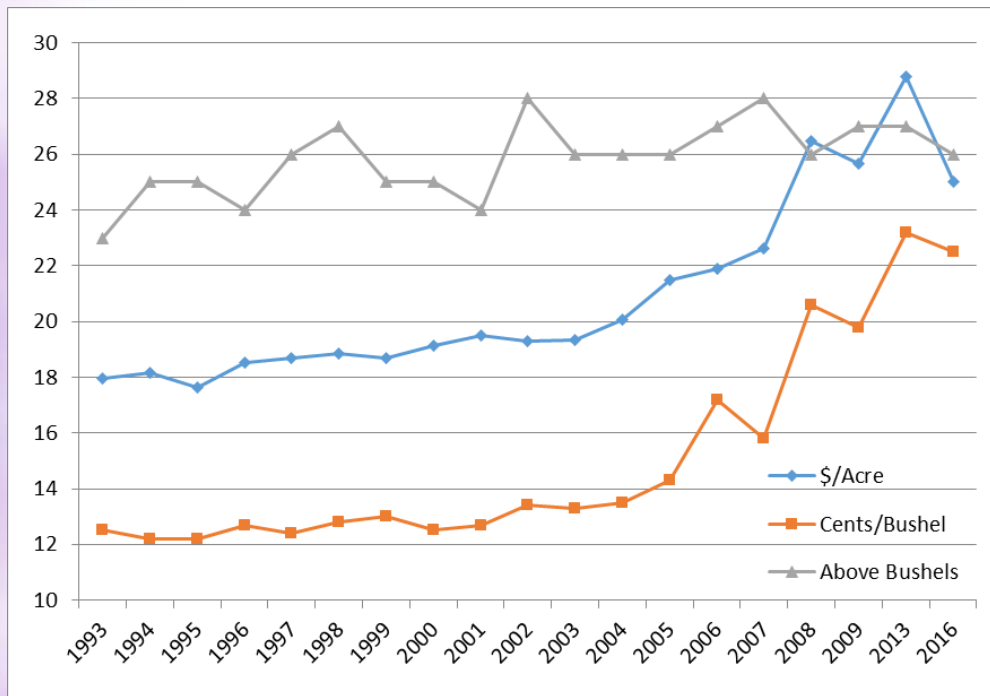
Harvesting Crops - Wheat



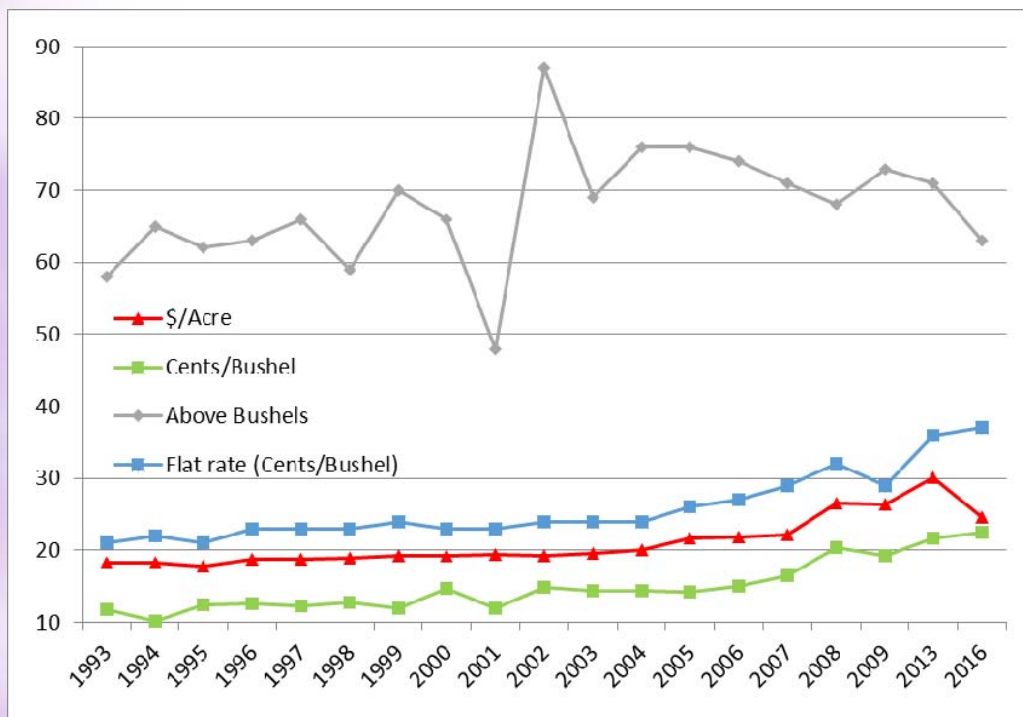
Harvesting Crops - Sorghum



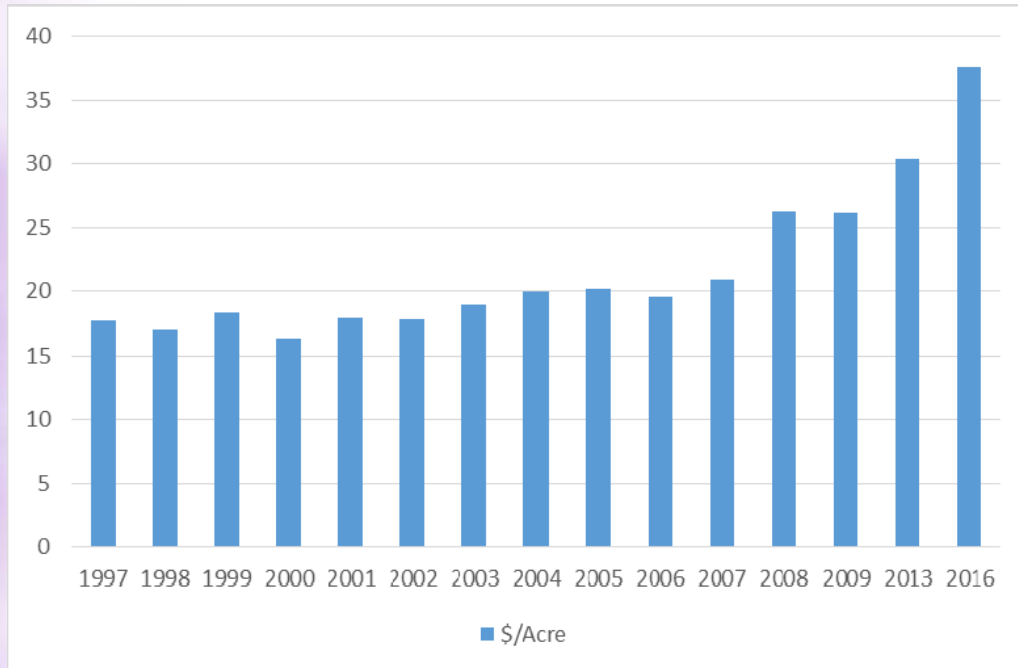
Harvesting Crops - Soybean



Harvesting Crops - Corn



Harvesting Crops - Sunflower



Custom Rates – Hauling Crops

Custom Rates for Hauling Grain from Field to Farm Storage or Elevator

Crop	# of Reports	Hauling Charge (Cents/Bushel)	Maximum Distance (Miles)	Extra Charge For Longer Distances (Cents Per Bushel Per Mile)
2016				
Wheat	36	20.2	21	1.2
Sorghum	9	21.0	21	1.3
Soybeans	19	19.2	21	1.3
Corn	22	19.9	18	1.8
2013				
Wheat	245	20.2	16	2.1
Sorghum	160	20.5	16	2.1
Soybeans	167	18.8	17	2.5
Corn	145	18.9	17	2.3

Custom Rates – Silage

Custom Rates for Silage Operations (\$/Ton)

Custom Work Operation	2016		2013	
	Range	Average	Range	Average
Filed chopping, hauling, and filling silo	7.00-14.00	10.46	4.50-16.25	9.17
Field chopping and hauling only	7.25-9.58	8.11	6.50-10.92	8.07
Field chopping only	7.00-8.25	7.75	1.40-8.50	5.21
Hauling only	0.25-3.00	1.65	0.25-4.00	2.33

Custom Rates – Haying & Baling

Custom Rates for Mowing, Swathing, or Raking (\$/Acre)

	# of Reports	Range	Average
		2016	
Mowing or Swathing Hay	8	5.50-19.00	13.04
Mowing or Swathing Forage	1	-	12.50
Swathing and Conditioning	9	11.00-18.00	12.83
Side Raking	8	2.00-6.00	4.38
		2013	
Mowing or Swathing Hay	150	5.00-20.00	12.86
Mowing or Swathing Forage	62	8.75-20.00	14.92
Swathing and Conditioning	150	6.00-25.00	13.54
Side Raking	98	1.00-20.00	4.58

Custom Rates – Haying & Baling

Custom Rates for Baling Hay (\$/Bale)

		2016			2013		
		# of Rep.	Range	Average	# of Rep.	Range	Average
Small bales, square	With wire	3	0.50-1.00	0.67	20	0.60-2.50	1.28
	With twine	3	0.50-1.35	1.03	23	0.55-3.00	1.16
Large Round Bales under 1,500 pounds	With net	8	10.00-17.50	12.53	64	6.00-25.00	12.34
	Without net	3	10.00-13.00	11.67	146	7.00-25.00	11.47
Large Round Bales over 1,500 pounds	With net	5	10.00-17.00	13.00	28	8.00-25.00	12.92
	Without net	No Response			101	8.00-15.00	11.96
Large Square Bales about 1 ton		3	8.00-16.00	13.00	35	6.00-24.00	14.10

Custom Rates – Haying & Baling

Hauling Hay from Field to Storage (\$/Bale)

	# of Reports	2016	
		Range	Average
Small Bales	2	0.65-1.00	0.83
Large Square Bales	2	2.25-5.00	3.63
Large Round Bales	5	1.50-7.00	4.07
		2013	
Small Bales	13	0.45-1.15	0.83
Large Bales	58	1.00-25.00	5.10

Custom Rates – Haying & Baling

Combination Custom Rates for Entire Haying & Baling Operation (\$/Bale)

	# of Reports	2016	
		Range	Average
Small Bales	1	-	3.00
Large Bale (\$/Bale)	5	22.00-29.00	25.50
Large Bales (\$/Ton)	1	-	40.00
2013			
Small Bales	10	1.00-5.00	1.84
Large Bale (\$/Bale)	48	12.00-50.00	22.34
Large Bales (\$/Ton)	15	17.50-65.00	33.47

Custom Rates – Land Tillage Operations

Custom Rates for Land Tillage, Historical Average (\$/Acre)

Type of Operation	2001	2002	2003	2004	2005	2006	2007	2008	2009	2013	2016
Disking	6.48	6.34	6.42	6.84	7.54	7.79	7.93	9.02	9.06	11.31	11.60
Offset Disk	6.54	6.72	7.02	7.01	7.76	8.53	8.37	9.56	9.52	10.98	12.00
Spiketooth Harrow	4.80	4.82	5.33	5.25	5.31	5.88	6.68	6.71	7.30	8.82	8.00
Springtooth Harrow	5.20	4.03	4.17	4.88	5.75	5.58	5.83	6.42	8.40	8.25	-
Chisel (4-12")	7.79	7.61	8.02	7.96	8.45	9.10	9.75	11.19	10.06	12.71	12.50
Deep Chisel (Over 12")	9.54	10.33	8.94	10.05	10.85	11.88	11.46	15.81	13.70	15.88	15.00
Moldboard Plow	8.98	9.45	9.98	11.63	11.36	11.04	10.64	15.41	14.00	14.13	-
Undercutter	5.38	5.38	5.47	5.58	6.07	6.43	6.66	7.73	7.42	9.34	10.92
Shank Cultivator	5.92	6.16	6.18	6.27	7.13	7.37	7.25	8.95	8.84	10.40	12.76

Custom Rates – Land Tillage Operations

Custom Rates for Tillage (\$/Acre)

	# of Response	Range	Average
Strip Tillage	7	12.45-20.00	17.01
Vertical Tillage-High Speed, Shallow	14	9.00-22.00	13.72

Custom Rates – Terracing & Dozing

Custom Rates for Terracing and Dozing

	2016		2013	
	Range	Average	Range	Average
Terracing (\$/Foot)	1.10-1.50	1.27	0.60-2.95	1.35
Dozing (\$/Hour)	95.00-165.00	132.14	45.00-200.00	127.54

Custom Rates – Mowing & Tree Shearing

	Rotary Mowing				Skid Loader Tree Shearing	
	(\$/Acre)		(\$/Hour)		(\$/Hour)	
	2016	2013	2016	2013	2016	2013
# of Reports	6	18	7	16	10	34
Range	7.60-40.00	8.00-20.00	2.00-180.00	45.00-105.00	30.00-150.00	50.00-105.00
Average	16.85	13.17	60.64	70.00	79.50	74.71

Custom Rates – Planting Operations

Custom Rates for Planting Operations (\$/Acre)

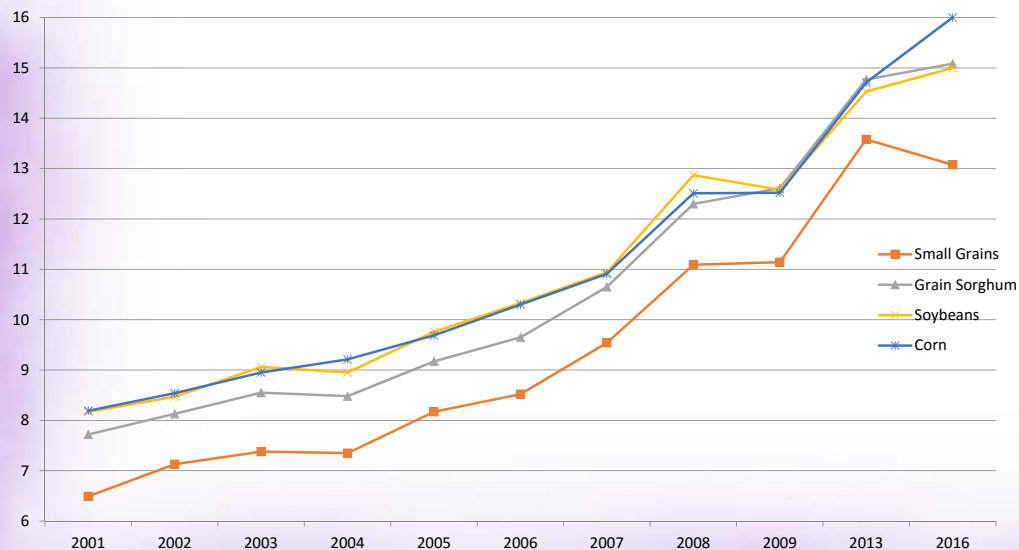
	Regular Till			Minimum or no Till		
	# of Rep.	Range	Average	# of Rep.	Range	Average
2016						
Small Grain Drilling	9	7.00-18.00	13.08	24	11.00-20.00	15.64
Sorghum - Row Plantings	6	13.00-18.00	15.08	16	13.00-20.00	16.10
Soybeans - Row Plantings	5	13.00-18.00	15.00	17	12.00-20.00	15.56
Corn - Row Plantings	9	13.00-20.00	16.00	28	7.50-25.00	16.47
Cover Crops Drilling	2	12.00-18.00	15.00	3	10.00-18.00	14.50
Cover Crops Broadcasting	1	-	5.00	1	-	6.50
2013						
Small Grain Drilling	119	6.00-25.00	13.58	154	8.00-25.00	15.52
Sorghum - Row Plantings	69	5.00-25.00	14.77	132	8.00-28.00	15.40
Soybeans - Row Plantings	59	5.00-20.00	14.53	132	7.00-28.00	15.74
Corn - Row Plantings	77	5.00-20.00	14.71	138	7.00-32.00	15.83

Custom Rates – Planting Operations

Custom Rates for seeding (\$/Acre)

	# of Rep.	2016		# of Rep.	2013	
		Range	Average		Range	Average
Grass seeding	5	10.00-15.00	12.80	13	6.00-20.00	15.35
Alfalfa and Legume seeding	6	10.00-18.00	14.25	26	6.00-25.00	15.04

Custom Rates – Regular Till Planting



Custom Rates – Minimum or No Till Planting

Custom Rates for Minimum or No Till Planting, Historical Averages (\$/Acre)

Crop	Small Grains	Grain Sorghum	Soybeans	Corn
2001	9.89	9.56	10.50	10.00
2002	10.11	9.91	10.46	10.04
2003	10.36	10.19	10.90	10.31
2004	10.72	10.29	10.84	10.55
2005	11.45	10.94	11.75	11.11
2006	11.77	11.26	12.00	11.57
2007	12.10	12.04	12.34	12.09
2008	13.73	13.49	14.07	13.57
2009	13.31	13.63	13.68	13.70
2013	15.52	15.40	15.74	15.83
2016	15.64	16.10	15.56	16.47

Custom Rates – Chemical Applications

Custom Rates for Chemical Application (\$/Acre)

Type of Operation or	# of Rep.	2016		# of Rep.	2013	
		Range	Average		Range	Average
Cultivation with Fertilizer	3	5.50-15.00	9.33	11	4.25-21.00	10.84
Cultivation without Fertilizer	4	5.00-17.00	9.00	16	2.00-18.00	9.39
Dry Fertilizer	36	3.75-25.00	5.90	214	3.75-14.00	5.31
Liquid Fertilizer	42	4.50-20.00	5.90	243	2.00-20.00	5.71
Anhydrous Ammonia	15	4.00-40.00	15.75	93	4.50-22.00	12.60
Herbicide-Aerial	16	5.75-30.00	9.25	51	4.20-12.00	7.60
Herbicide-Ground Rig	54	4.50-26.00	6.13	294	5.00-15.00	5.44
Insecticide-Aerial	21	5.00-36.00	9.20	44	4.50-13.00	7.73
Insecticide-Ground Rig	37	4.50-15.00	5.97	214	4.00-10.00	5.45

Custom Rates – Chemical Applications

Custom Rates for Chemical Application, Historical Averages (\$/Acre)

Type of Operation or	2001	2002	2003	2004	2005	2006	2007	2008	2009	2013	2016
Cultivation with Fertilizer	6.77	6.19	6.64	6.73	7.59	7.60	6.33	8.41	8.00	10.84	9.33
Cultivation without Fertilizer	6.25	6.01	5.95	6.08	7.05	7.09	6.32	8.46	7.24	9.39	9.00
Dry Fertilizer	3.53	3.58	3.68	3.78	4.01	4.15	4.20	4.96	4.68	5.31	5.90
Liquid Fertilizer	3.57	3.72	3.78	3.87	4.17	4.42	4.37	4.98	4.82	5.71	5.90
Anhydrous Ammonia	5.61	5.90	6.18	6.93	7.12	6.75	8.46	10.20	10.55	12.60	15.75
Herbicide-Aerial	4.39	4.52	4.30	4.29	4.56	4.83	5.19	6.20	6.93	7.60	9.25
Herbicide-Ground Rig	3.72	3.81	3.85	4.03	4.26	4.40	4.50	5.01	4.98	5.44	6.13
Insecticide-Aerial	4.42	4.49	4.83	4.30	4.74	5.20	5.48	6.20	6.60	7.73	9.20
Insecticide-Ground Rig	3.77	3.90	3.92	4.02	4.33	4.51	4.49	5.07	4.95	5.45	5.97

Custom Rates – Seed Cleaning

Custom Rates for Wheat Seed Cleaning (\$/Bushel)

	With Treatment		Without Treatment	
	2016	2013	2016	2013
Number of Reports	6	42	13	92
Range	0.50-6.25	0.20-11.00	0.45-0.90	0.20-3.55
Average	2.38	2.87	0.62	0.73

Custom Rates – Seed Cleaning

Historical Custom Rates for Seed Cleaning

Year	Wheat (\$/Bushel)		Alfalfa (\$/lb)		Red Clover (\$/lb)	
	With Treatment	Without Treatment	Without Treatment	Without Treatment	Without Treatment	Without Treatment
2003	0.90	0.48	0.33		1/	
2004	0.82	0.47	1/		1/	
2005	0.98	0.48	0.18		0.22	
2006	1.14	0.51	1/		1/	
2007	1.07	0.54	0.16		0.18	
2008	1.45	0.60	0.40		1/	
2009	1.36	0.58	0.23		0.15	
2013	2.87	0.73	0.40		0.69	
2016	2.38	0.62	0.18		0.18	

^{1/} Insufficient number of reports.

Custom Rates – Feed Preparation

Custom Rates for Feed Preparation, Historical Average (\$/cwt)

Type of Preparation	2001	2002	2003	2004	2005	2006	2007	2008	2009	2013	2016
Grinding Grain	0.34	0.36	0.35	0.36	0.39	0.38	0.44	0.4	0.41	0.37	0.49
Rolling Grain	0.31	0.33	0.33	0.34	0.36	0.37	0.39	0.36	0.37	0.38	0.44
Mixing Feed	0.23	0.26	0.26	0.26	0.28	0.28	0.33	0.34	0.32	0.33	0.35
Rolling and Mixing	0.49	0.51	0.52	0.56	0.58	0.58	0.57	0.64	0.61	0.72	0.90
Grinding and Mixing	0.53	0.53	0.57	0.57	0.62	0.61	0.58	0.68	0.67	0.69	0.60
Pelleting Feed	0.7	0.76	0.84	0.79	0.89	0.86	0.83	1.03	0.9	1.17	1.00
Sacking Feed(excluding sack costs)	0.91	0.95	1.16	1.12	1.15	1.13	1.27	1.44	1.3	1.49	1.49

Custom Rates – Feed Delivery

Custom Rates for Feed Delivery

Load Charge + Charge Per Mile	# of Reports	Range	Average
Charge Per Load. (\$)	5	10.00-40.00	24.00
Dollars Per Loaded Mile(\$)	5	2.00-2.50	2.25
Average Load (ton)	4	3.00-12.00	6.50
Load Charge + Charge Per Ton			
Charge Per Load (\$)	2	35.00-50.00	42.50
Dollars Per Ton (\$/Ton)	1	-	5.00
Average Load (Ton)	2	6.00-18.00	12.00
Straight Charge Per Mile			
Dollars Per Loaded Mile	3	1.00-3.00	2.00
Average Load	3	6.00-15.00	9.67
Straight Charge Per Ton			
Dollars Per Ton(\$/Ton)	2	6.30-10.00	8.15
Average Load (Ton)	2	4.00-20.00	12.00
Flat Rate Per Load			
Charge Per Load (\$/Load)	2	30.00-50.00	40.00
Average Load (ton)	2	3.00-4.00	3.50

Custom Rates – Feed Delivery

Custom Rates for Feed Delivery, Extra Charge

	Extra Charge All Methods	
	2016	2013
Number of Reports	7	14
Max Miles (Mile)	28	19
Extra Dollars per Mile (\$/Mile)	1.83	2.10

Custom Rates – Manure Removal & Spreading

Custom Rates for Manure Removal

	2016			2013		
	# of Rep.	Range	Average	# of Rep.	Range	Average
Manure Removal (\$/Ton)	1	-	3.00	6	0.35-3.00	1.81
Removal and Spreading (\$/Ton)	7	1.60-6.00	3.64	13	1.50-4.50	2.70
Additional Charges per Mile (\$/Mile)	3	0.25-4.75	1.75	11	0.20-6.50	2.74

Custom Rates – Machinery Rental

Custom Rates for Machinery Rental

	2016				2013			
	# of Rep.	Average	Max	Min	# of Rep.	Average	Max	Min
Combine (\$/Hour)	3	136.67	150	110	4	144.25	200	27.00
Corn Header(\$/Acre)	1	12.00	12	12	1/	1/	1/	1/
No Till Drill (\$/Hour)	2	7.75	9.5	6	1/	1/	1/	1/
Dry Fertilizer Applicator (\$/Ton)	5	8.30	12	3.5	38	12.32	50	6.00
Anhydrous Applicator (\$/Acre)	2	9.00	12	6	6	4.43	5	2.85
Liquid Fertilizer Applicator (\$/Acre)	1	4.00	4	4	4	3.25	4	2.50
Chemical Sprayer (\$/Hour)	2	112.50	125	100	1/	1/	1/	1/
Tractor (\$/hour)	3	65.67	75	50	9	76.28	200	25.00
Skid Loader (\$/Day)	2	87.50	99	76	1/	1/	1/	1/

^{1/} Insufficient number of reports.

We welcome more input for our survey!

Questions?