

Custom Rates for Farm Services in Missouri

The rates reported in this guide summarize a statewide survey conducted online and by solicitations of University of Missouri Extension specialists in the winter of 2019-2020. We asked farmers, agribusiness firms and land improvement contractors to provide the rates they were charging or paying in 2019 for custom services, excluding the cost of materials being applied. Thank you to those who provided information — even if it was just for one activity.

Fewer people respond to this survey every time it is taken – every three years. There may be fewer farmers using custom operators or fewer businesses conducting custom activities. But it is still a very popular Extension guide.

The number of responses to many questions asked was too low to have statistical confidence in the results. However, the results presented here have been compared to custom rates guides in Kansas and Iowa to see if our rates are in line with their rates. These results have also been compared to previous custom rates surveys to see if the direction and magnitude of changes seems reasonable.

Custom rates cover the cost of machinery, fuel, labor and, occasionally, a product such as lime or bale wrap. The USDA reports that machinery values and labor costs have increased by about 5 percent and 11 percent, respectively, since our last custom rate survey in 2016. Diesel prices have increased by 20 percent in the last three years. This increase in the costs of inputs into custom activities suggest that custom rates should have increased over the past several years.

There is no assurance that the average rates reported in this guide will cover your costs for performing the service or that you will be able to hire a custom operator in your area for the rates shown. *Calculate your own costs carefully before deciding the rate to charge or pay. Before entering into an agreement, discuss with the other party all the details of the specific job to be performed.*

Explanation of the rates in this guide

Rates in this guide reflect each respondent's judgment of a "normal" job. Operators may add charges if they consider a job abnormal, such as distance from the operator's base location, the amount of product or labor involved, the difficulty of the terrain, or special requirements of the customer or location.

The "Number reporting" and "Range in rates" columns are important. The "Average rate" column indicates the average charge for all of the rates in that row. The "Mid" rate had an equal number of responses higher and lower.

As in past years, this guide reports the average rate, and the low, mid and high rates reported by those providing responses. When few responses are averaged, a single response can move the average a lot. Because of the low response rate and the undue influence a single response may have on the average, this year two new columns are reported for all custom activities: second lowest response and second highest response. By comparing the two lowest and the two highest responses, users can see if perhaps the extreme responses were not representative of the next closest responses. In this situation, the extremes may have unduly influenced the average reported. The lowest and highest responses also give the user an idea of how variable the rates charged for field activities might be.

Possible explanations of the wide ranges are the type or size of equipment used, the mix of labor and equipment used, or different income needs of full-time custom operators compared to local farmers supplementing their income.

Table 1. Field work activities.

Activity	Average rate	Range in rates					Number reporting
		Lowest	Second lowest	Mid	Second highest	Highest	
V-rip or subsoil plowing	\$23.63 / acre	\$18.00	\$18.00	\$21.00	\$30.00	\$35.00	8
Chisel plow	18.25 / acre	16.00		18.00		20.00	6
Heavy or offset disking	14.92 / acre	12.00		15.50		17.50	6
Tandem disk	14.79 / acre	10.00	10.00	15.00	20.00	20.00	14
Vertical tillage tool	16.60 / acre	10.00	12.00	16.50	20.00	25.00	10
Field cultivator	13.50 / acre	8.00	8.00	14.00	16.00	20.00	13
Cut brush (brush hog)	88.75 / hour	50.00	65.00	85.00	100.00	150.00	8
Mow pasture or CRP land	85.00 / hour	50.00	75.00	95.00	100.00	100.00	7
	21.25 / acre	14.00	16.00	21.00	25.00	30.00	8

Table 2. Planting activities.

Activity	Average rate	Range in rates					Number reporting
		Lowest	Second lowest	Mid	Second highest	Highest	
Conventional planting							
Corn or grain sorghum: <i>plant only</i>	\$17.65 / acre	\$10.00	\$10.00	\$18.00	\$22.00	\$35.00	24
Corn or grain sorghum: <i>plant and apply fertilizer or chemicals</i>	20.00 / acre	15.00		20.00		25.00	6
Soybean: <i>plant 15- or 30-inch rows</i>	18.00 / acre	10.00	10.00	18.00	22.00	35.00	17
Soybean: <i>drill 7- or 9-inch rows</i>	16.75 / acre	12.00	15.00	17.00	20.00	20.00	8
Small grains, grass or clover: <i>drill</i>	16.60 / acre	15.00	15.00	16.00	20.00	20.00	10
No-till planting							
Corn or grain sorghum: <i>plant only</i>	18.72 / acre	12.00	14.00	18.00	24.00	35.00	23
Corn or grain sorghum: <i>plant and apply fertilizer or chemicals</i>	21.33 / acre	15.00		20.00		30.00	6
Soybean: <i>plant 15- or 30-inch rows</i>	17.82 / acre	10.00	12.00	18.00	24.00	25.00	21
Soybean: <i>drill 7- or 9-inch rows</i>	17.78 / acre	14.00	15.00	18.00	20.00	22.00	9
Small grains, grass or clover: <i>drill</i>	16.75 / acre	15.00	16.00	16.00	20.00	20.00	8

Table 3. Fertilizer and chemical application.

Application	Average rate	Range in rates					Number reporting
		Lowest	Second lowest	Mid	Second highest	Highest	
Deliver and spread fertilizer (not including the cost of fertilizer)							
Dry fertilizer on cropland: <i>single spread</i>	\$6.18 / acre	\$4.00	\$4.00	\$6.00	\$8.00	\$10.00	15
Dry fertilizer on cropland: <i>double spread</i>	9.64 / acre	6.00	7.00	8.00	14.00	18.00	11
Dry fertilizer on cropland: <i>variable rate</i>	8.67 / acre	7.00		9.00		10.00	6
Dry fertilizer on pasture (topdressing)	6.31 / acre	4.00	5.00	6.00	7.00	10.00	12
Dry fertilizer plus seed	8.60 / acre	6.00	7.00	8.00	10.00	14.00	10
Spray liquid fertilizer	6.67 / acre	6.00		6.50		8.00	6
Spray liquid fertilizer and other chemicals	6.69 / acre	5.00	6.00	6.50	8.00	8.50	8
Inject anhydrous ammonia	14.39 / acre	10.00	12.00	15.00	15.00	20.00	9
Lime							
Deliver and spread: <i>including lime</i>	23.03 / acre	19.00	20.00	23.00	25.00	30.00	9
Spread only	8.00 / ton	5.00		6.00		16.00	6
Apply chemicals (not including the cost of chemicals)							
Spray with self-propelled crop sprayer	6.94 / acre	5.00	6.00	7.00	8.00	8.00	16

Table 4. Harvesting and hauling activities.

Activity	Average rate	Range in rates					Number reporting
		Lowest	Second lowest	Mid	Second highest	Highest	
Combining							
Corn	\$34.69 / acre	\$28.00	\$28.00	\$35.00	\$50.00	\$50.00	40
Soybean	33.62 / acre	25.00	25.00	34.00	45.00	48.00	41
Grain sorghum	34.13 / acre	30.00	30.00	33.50	39.00	40.00	8
Small grains	31.41 / acre	25.00	25.00	30.00	39.00	40.00	17
Making corn or grain sorghum silage							
Field chop only	8.50 / ton	7.00		8.00		10.00	6
Chop, haul and pile/fill bunker	10.96 / ton	8.75		10.00		15.00	6
Hauling grain or seed							
Field to farm storage with farm vehicle or wagon	0.14 / bushel	0.10	0.10	0.11	0.30	0.30	17
Bin to market with large grain truck over 20 miles	0.26 / bushel	0.15	0.20	0.25	0.30	0.45	9
	4.15 / loaded mile	3.00	3.45	4.13	5.00	5.00	8
Hauling livestock							
Hauling livestock long distance with gooseneck trailer or farm truck	3.61 / loaded mile	2.00	2.40	3.75	4.00	6.00	8

Table 5. Harvesting and hauling hay.

Activity	Average rate	Range in rates					Number reporting
		Lowest	Second lowest	Mid	Second highest	Highest	
Hay preparation							
Cutting hay with disk cutter or sickle bar	\$12.88 / acre	\$5.00	\$10.00	\$12.00	\$15.00	\$25.00	8
Cutting and conditioning	14.96 / acre	7.00	7.50	15.00	20.00	30.00	13
Raking hay	6.64 / acre	3.00	5.00	6.00	10.00	10.00	14
Hay tedding	7.14 / acre	3.00	4.00	8.00	10.00	10.00	7
Round baling only							
Small bales (750–1,000 lb.)	10.69 / bale	9.00	10.00	10.00	12.00	12.50	8
Medium bales (1,000–1,500 lb.)	13.29 / bale	9.00	10.00	14.00	15.00	18.00	7
Large bales (1,500+ lb.)	12.90 / bale	10.00		12.00		18.00	5
Cut, rake and bale							
Small bales (750–1,000 lb.)	21.29 / bale	18.00	18.00	20.00	25.00	25.00	7
Medium bales (1,000–1,500 lb.)	24.63 / bale	18.00	19.00	24.50	30.00	32.00	8
Cut, rake, bale and net wrap							
Small bales (750–1,000 lb.)	20.00 / bale	15.00	17.00	20.00	25.00	28.00	14
Medium bales (1,000–1,500 lb.)	20.58 / bale	16.00	16.00	20.00	24.00	25.00	12
Large bales (1,500+ lb.)	25.25 / bale	22.00		25.00		29.50	6
Bale and net wrap							
Small bales (750–1,000 lb.)	10.81 / bale	10.00	10.00	10.00	12.50	14.00	8
Medium bales (1,000–1,500 lb.)	13.13 / bale	9.00	10.00	13.00	14.00	20.00	8
Large bales (1,500+ lb.)	13.79 / bale	11.00	12.00	13.50	16.00	16.00	7
Other hay activities							
Small square baling only (50-100 lbs.)	0.97 / bale	0.75	0.75	0.90	1.10	1.50	7
Wrap individual round bale in plastic: <i>including plastic cost</i>	9.14 / bale	6.00	9.00	10.00	10.00	10.00	7
Move round bales on-farm or locally	4.29 / bale	2.50	2.50	5.00	5.00	5.00	7

Table 6. Earth moving and heavy equipment jobs.

Job	Average rate	Range in rates					Number reporting
		Lowest	Second lowest	Mid	Second highest	Highest	
By type of equipment used (including operator labor)							
Bulldozer: <i>under 100 hp</i>	\$106.43 / hour	\$90.00	\$90.00	\$100.00	\$115.00	\$150.00	7
Bulldozer: <i>100–150 hp</i>	133.21 / hour	100.00	100.00	127.50	175.00	175.00	14
Bulldozer: <i>over 150 hp</i>	158.16 / hour	125.00	130.00	150.00	225.00	225.00	19
Scraper: <i>under 10 cubic yard capacity</i>	126.67 / hour	95.00		127.50		175.00	6
Scraper: <i>10–15 cubic yard capacity</i>	142.50 / hour	100.00	125.00	145.00	165.00	180.00	12
Scraper: <i>over 15 cubic yard capacity</i>	198.00 / hour	80.00	150.00	182.50	300.00	300.00	10
Track-type loader: <i>100 hp or larger</i>	142.78 / hour	95.00	125.00	150.00	175.00	185.00	9
Track hoe/excavator: <i>mini (2–6 tons)</i>	103.67 / hour	75.00	85.00	100.00	130.00	135.00	15
Track hoe/excavator: <i>medium and large</i>	139.32 / hour	80.00	95.00	140.00	175.00	175.00	22
Back hoe	89.23 / hour	60.00	75.00	90.00	100.00	125.00	13
Skid loader	87.63 / hour	60.00	65.00	85.00	110.00	110.00	19
Tiling machine	0.96 / linear ft.	0.35	0.40	1.00	1.50	1.56	9
Trencher	1.61 / linear ft.	1.00	1.25	1.45	2.50	3.00	11
By job performed							
Building ponds and lakes	3.34 / cu. yd.	2.50	2.75	3.13	4.00	4.50	7
	154.50 / hour	125.00	125.00	147.50	200.00	225.00	14
Land leveling	155.00 / hour	125.00	125.00	150.00	200.00	225.00	15
Land clearing: <i>cut brush and trees; pile on site</i>	158.31 / hour	125.00	130.00	150.00	200.00	200.00	13
Land clearing: <i>remove brush, trees, stumps; pile on site</i>	163.20 / hour	130.00	130.00	150.00	200.00	225.00	15
Building terraces: <i>conventional gradient</i>	147.92 / hour	100.00	125.00	142.50	175.00	200.00	12
Building terraces: <i>parallel, cut and fill to grass outlets</i>	3.80 / linear ft.	2.98		3.75		5.00	6
	147.50 / hour	100.00	125.00	140.00	175.00	200.00	12
Building terraces: <i>parallel, with storage to tile outlets</i>	3.80 / linear ft.	2.95	3.00	4.00	4.30	5.00	7
	146.77 / hour	100.00	125.00	140.00	188.00	200.00	13
Building terraces: <i>diversion</i>	3.91 / linear ft.	3.00		4.00		5.00	5
	147.92 / hour	100.00	125.00	142.50	175.00	200.00	12
Building terraces: <i>grade and shape grass waterways</i>	142.50 / hour	90.00	100.00	140.00	175.00	200.00	14
Building terraces: <i>ditch construction</i>	144.09 / hour	90.00	115.00	145.00	175.00	175.00	11