

# Custom Rates for Farm and Ranch Services in Mississippi

The rates presented in this publication represent the responses of a statewide survey conducted from February to March 2013 by Mississippi State University Extension agricultural economists. Survey respondents include both providers and users of custom services, and data reflect the prices paid for typical farm and ranch custom operations.

The survey data in this publication include rates for tractor rental, row crop field operations, harvesting, hay baling, and various land improvements and livestock services. For each rate, five statistics are reported: average rate, minimum, median, and maximum rates, and number of responses. The median statistic has an equal number of responses higher and lower. Some items have very few responses, so the average rate may not be representative of rates in your area. Because of differing types or size of equipment used and the size of the job, some items may have a wide range of responses.

This publication is intended only as a guide. Farmers and ranchers desiring to perform or have custom work performed should realize that these rates are often negotiable. Also, per-acre

costs and hours of annual use will likely vary for each producer and operation; therefore, producers should use their own costs whenever possible. Additionally, input costs and interest rates could change at any time, so consider any needed adjustments accordingly. If you do not have your own data to calculate machinery operation costs, estimates for various machinery operations are included in MSU budget publications available through local county Extension offices or at <https://www.agecon.msstate.edu/whatwedo/budgets.php>.

In order for the custom work to be truly economically beneficial for the contractor, the custom rate must at least cover fixed and direct costs and provide some additional return. When using your own costs, the fixed and direct costs need to be adjusted upward to achieve a profit. In Mississippi, a markup in the range of 20–40 percent is suggested by custom operators and farmers (Martin, 2007). Farmers providing custom work may desire a lower or higher return, depending on the level of management required.

## Tractor Rental (Excludes cost of operator and fuel)

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
Less than 100 hp	Dollars per hour	\$43.89	\$20.00	\$45.00	\$80.00	9
100 to 149 hp	Dollars per hour	\$61.25	\$30.00	\$60.00	\$100.00	8
150 to 250 hp	Dollars per hour	\$62.50	\$35.00	\$55.00	\$115.00	8

## Land Tillage Operations (Includes cost of operator, machine, and fuel)

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
Moldboard plowing	Dollars per acre	\$12.00	\$6.00	\$10.00	\$20.00	3
Chisel plowing	Dollars per acre	\$14.29	\$6.00	\$15.00	\$20.00	7
Disk/chiseling	Dollars per acre	\$12.55	\$6.00	\$12.25	\$20.00	10
Subsoiling	Dollars per acre	\$14.04	\$6.00	\$14.50	\$22.00	12
V-ripping	Dollars per acre	\$11.00	\$9.00	\$12.00	\$12.00	3
Tandem disking	Dollars per acre	\$12.12	\$7.00	\$12.00	\$25.00	13
Offset disking	Dollars per acre	\$13.75	\$10.00	\$10.00	\$25.00	4
Field cultivating	Dollars per acre	\$8.80	\$3.00	\$10.00	\$12.00	11
Bed disking (hipper)	Dollars per acre	\$10.38	\$5.00	\$12.00	\$12.50	4
Stalk cutting/shredding	Dollars per acre	\$7.52	\$4.00	\$7.08	\$12.00	8

**Crop Planting Operations (Includes cost of operator, machine, and fuel, but excludes cost of seed and other materials)**

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
Planting: cotton, grain sorghum, corn, soybeans	Dollars per acre	\$13.00	\$8.00	\$12.50	\$20.00	12
Drilling: small grains, grain sorghum, ryegrass, soybeans, other beans	Dollars per acre	\$13.17	\$10.00	\$12.25	\$20.00	6
No till planting: cotton, grain sorghum, corn, soybeans	Dollars per acre	\$12.19	\$5.00	\$11.00	\$18.00	8
No till drilling: small grains, grain sorghum, ryegrass, soybeans	Dollars per acre	\$12.67	\$5.00	\$12.00	\$25.00	9
Planting: Peanuts	Dollars per acre	\$18.33	\$10.00	\$15.00	\$30.00	3
Drilling: Rice	Dollars per acre	\$14.38	\$8.00	\$13.75	\$22.00	4
Grass seeding drilling: ryegrass, sudan, other	Dollars per acre	\$11.00	\$5.00	\$10.00	\$25.00	11

**Application of Fertilizer and Lime (Includes cost of operator, machine, and fuel, but excludes cost of materials)**

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
Dry bulk fertilizer	Dollars per acre	\$7.54	\$4.00	\$6.13	\$20.00	38
Liquid fertilizer	Dollars per acre	\$7.73	\$4.00	\$7.75	\$12.00	14
Lime application	Dollars per ton	\$9.09	\$4.00	\$8.00	\$20.00	22
Manure/compost spreading	Dollars per ton	\$12.44	\$5.00	\$10.00	\$25.00	18

**Application of Chemicals (Includes cost of operator, machine, and fuel, but excludes cost of materials)**

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
Ground, broadcast, tractor	Dollars per acre	\$7.73	\$4.00	\$6.00	\$20.00	20
Ground, incorporated, tractor	Dollars per acre	\$7.25	\$5.00	\$7.00	\$10.00	4
Ground, broadcast, self propelled	Dollars per acre	\$6.29	\$4.00	\$6.00	\$8.00	21
Aerial (1 gal/acre)	Dollars per acre	\$6.42	\$2.00	\$5.75	\$12.00	6
Aerial (3 gal/acre)	Dollars per acre	\$5.26	\$3.00	\$5.00	\$7.00	14
Aerial (5 gal/acre)	Dollars per acre	\$5.96	\$4.75	\$5.75	\$7.50	12
Aerial (10 gal/acre)	Dollars per acre	\$7.75	\$6.75	\$7.50	\$9.00	3

**Cotton Harvesting (Includes cost of operator, machine, and fuel)**

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
Picking cotton/on-board moduling (round or square modules)	Dollars per lint pound	\$0.12	\$0.10	\$0.12	\$0.15	4
Picking cotton and moduling	Dollars per lint pound	\$0.13	\$0.10	\$0.13	\$0.17	6

**Combining and Hauling (Includes cost of operator, machine, and fuel)**

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
<b>Combining and hauling grains: flat rate (no extra charges)</b>						
Corn	Dollars per bushel	\$0.63	\$0.25	\$0.58	\$1.25	6
Soybeans	Dollars per bushel	\$1.03	\$0.25	\$1.00	\$1.75	9
<b>Combining and hauling grains: acre rate and hauling by bushel</b>						
Corn (Combining)	Base rate \$/ac	\$35.27	\$25.00	\$35.00	\$50.00	13
Corn (Hauling)	Base rate \$/bu	\$0.23	\$0.12	\$0.20	\$0.34	11
Soybeans (Combining)	Base rate \$/ac	\$34.02	\$20.00	\$34.25	\$60.00	22
Soybeans (Hauling)	Base rate \$/bu	\$0.27	\$0.12	\$0.27	\$0.50	18
Wheat (Combining)	Base rate \$/ac	\$33.06	\$20.00	\$30.00	\$45.00	9
Wheat (Hauling)	Base rate \$/bu	\$0.26	\$0.15	\$0.27	\$0.35	9
Grain Sorghum (Combining)	Base rate \$/ac	\$28.75	\$20.00	\$30.00	\$35.00	4
Grain Sorghum (Hauling)	Base rate \$/bu	\$0.25	\$0.15	\$0.25	\$0.34	5
Hauling grains	Dollars per loaded mile	\$3.65	\$1.75	\$4.00	\$5.00	5

**Crop Consulting Services**

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
Crop production consulting service	Dollars per acre	\$6.92	\$5.00	\$7.00	\$8.00	13

**Land Preparation and Other Farm or Ranch Operations (Includes costs of operator, machine, and fuel)**

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
Pond construction and/or maintenance	Dollars per yard	\$2.59	\$0.75	\$2.80	\$4.00	4
Pond construction and/or maintenance	Dollars per hour	\$103.93	\$55.00	\$92.50	\$250.00	14
Grade and shape waterways	Dollars per hour	\$82.50	\$65.00	\$82.50	\$100.00	4
Ditch construction	Dollars per hour	\$77.86	\$50.00	\$65.00	\$135.00	7

**Haying Operations (Includes cost of operator, machine, and fuel)**

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
<b>Complete job (mow, condition, rake, and bale)</b>						
Twine tie or wire tie – small square bale	Dollars per bale	\$2.02	\$1.10	\$1.75	\$4.50	19
Round bale – twine tie – 1,500 lb or less	Dollars per roll	\$19.63	\$10.00	\$19.50	\$35.00	46
Round bale – twine tie – over 1,500 lb	Dollars per roll	\$23.96	\$18.00	\$25.00	\$40.00	13
Round bale – full wrap – 1,500 lb or less	Dollars per roll	\$19.17	\$15.00	\$20.00	\$20.00	6
Round bale – full wrap – over 1,500 lb	Dollars per roll	\$18.20	\$12.00	\$20.00	\$22.00	5
<b>Baling only</b>						
Twine tie or wire tie – small square bale	Dollars per bale	\$1.13	\$0.50	\$1.00	\$2.50	13
Round bale – twine tie – 1,500 lb or less	Dollars per roll	\$11.07	\$5.00	\$10.00	\$25.00	30
Round bale – twine tie – over 1,500 lb	Dollars per roll	\$13.42	\$6.00	\$12.00	\$25.00	12
Round bale – full wrap – 1,500 lb or less	Dollars per roll	\$12.17	\$10.00	\$10.50	\$20.00	6
<b>Hauling hay (field to storage)</b>						
Small square bale	Dollars per bale	\$0.78	\$0.25	\$0.75	\$2.00	11
Round bale – 1,500 lb or less	Dollars per roll	\$3.46	\$1.00	\$2.75	\$8.00	14
Round bale – over 1,500 lb	Dollars per roll	\$5.14	\$2.00	\$5.00	\$10.00	7
<b>Hauling hay (flat rate)</b>						
Semi trailer	Dollars per loaded mile	\$3.48	\$2.75	\$3.15	\$5.00	5
Other trailers	Dollars per loaded mile	\$3.88	\$1.50	\$2.00	\$10.00	4

**Miscellaneous Operations (Includes labor and equipment)**

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
Feed grinding and mixing at mill (excludes materials)	Dollars per ton	\$23.33	\$10.00	\$20.00	\$40.00	3
<b>Fence building (excludes materials)</b>						
4 to 6 wire with steel posts	Dollars per hour	\$10.80	\$9.00	\$10.00	\$15.00	5
4 to 6 wire with wood posts	Dollars per hour	\$11.17	\$8.50	\$10.00	\$15.00	3

## Livestock Operations (Includes labor and equipment)

	Unit	Average Rate	Low Rate	Median Rate	High Rate	Number Reporting
<b>Cattle:</b>						
Pregnancy testing	Dollars per head	\$4.63	\$2.50	\$4.50	\$8.00	12
Spraying	Dollars per head	\$3.50	\$2.00	\$3.00	\$6.00	6
Cattle processing (dehorning, branding, castrating, vaccinating, deworming)	Dollars per head	\$11.50	\$1.00	\$10.00	\$30.00	23
<b>Cattle hauling, flat rate (no extra charges)</b>						
18-wheeler	Dollars per loaded mile	\$3.29	\$2.00	\$3.50	\$5.00	5
All other trucks and trailers	Dollars per head	\$10.77	\$3.00	\$10.00	\$20.00	9
All other trucks and trailers	Dollars per load	\$55.50	\$25.00	\$50.00	\$100.00	10
All other trucks and trailers	Dollars per loaded mile	\$2.52	\$1.15	\$2.63	\$4.50	10

## Costs of Ownership and Operation

The management decision to own a machine, to custom hire operations performed, or to custom perform operations is partially determined by cost, which is heavily influenced by the amount of use realized over the period of machine ownership. Estimates of fixed and variable costs per hour can be approximated using the following steps. Unless accurate records are used to estimate costs, variability in machine and operator efficiencies can cause actual results to be significantly different from estimated results (Doye and Sah).

## References

Doye, D.D. and R. Sah. Oklahoma Farm and Ranch Custom Rates, 2011-2012. Oklahoma Cooperative Extension Service Current Report CR-205. Oklahoma State University Division of Agricultural Sciences and Natural Resources. November 2011.

Martin, S. W. Custom Rates for Mississippi Agriculture, 2007. Mississippi Agricultural and Forestry Experiment Station. Information Sheet. No. 1348. Mississippi State University. November 2007.

A. Acres per hour = acres covered in normal day ÷ hours in normal day

B. Average investment = (original cost + trade-in value) ÷ 2

C. Annual depreciation = (original cost – trade-in value) ÷ number of years owned

D. Annual interest = average investment x interest rate

E. Annual taxes = average investment x personal tax rate<sup>1</sup>

F. Annual insurance = average investment x insurance rate<sup>2</sup>

G. Total annual ownership costs (sum of C through F)

H. Ownership costs per acre = total annual ownership costs ÷ acres per year

I. Repairs per acre = repairs<sup>3</sup> ÷ acres per year

J. Fuel cost per acre = fuel price x gallons per hour ÷ acres per hour

K. Labor costs per acre = daily wage ÷ acres per day

L. Total cost per acre = sum of items H through K

<sup>1</sup>Use your local tax rate if known. One to two percent is a reasonable "guesstimate."

<sup>2</sup>Use your own insurance rate if known. One-half to one percent is a reasonable "guesstimate."

<sup>3</sup>Use your own repair expense data, if available. One percent of original price for each year machine is kept is a rough estimate (e.g., 10 percent per year if the machine is to be used for 10 years).

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