

AGRICULTURAL GUIDE

Published by the University of Missouri-Columbia Extension Division

Farm Management

1985 custom rates for farm services in Missouri

JUN 11 1986

Kevin C. Moore, Richard K. Rudel
and Gerald M. Ehlmann,
Department of Agricultural Economics,
and Donald L. Pfost,
Department of Agricultural Engineering,
College of Agriculture

The custom rates reported in this guide were revised based on a statewide survey conducted in January 1986. Questionnaires were sent to farmers, agri-business firms, aerial applicators, and land improvement contractors known to be performing custom services.

Rate data from the questionnaires were tabulated according to the most common rate reported, a simple average of all rates, and the range of the rates reported for the custom service being performed.

BASIS FOR CHARGES. In general, rates are reported on the basis of acres or yield. In some cases, however, rates were reported on another basis such as per hour.

Hourly rates are often difficult to interpret because they depend on the size of equipment used. Whenever acres per hour were reported along with the hourly charges, these rates were converted to dollars per acre.

Earth moving charges are reported per hour by size of equipment used. However, contractor estimates for

performing various jobs are also reported by cubic yard or other appropriate quantity units.

RATES MAY NOT COVER COSTS. The rates in this guide are the "going rates" charged in 1985. There is no assurance that the average or most common rate reported will cover the cost of performing the service. In some cases the reported rates are less than the amount needed to cover operating, labor and fixed machinery costs. The farmer who performs custom services is able to charge a rate below total cost because any income over cash expenses goes toward paying the fixed cost of a machine he already owns. The full-time custom operator, however, must charge a rate to cover all costs (including a normal profit). A custom operator should, therefore, carefully estimate his costs to determine if they are, or will be covered by the "going rate."*

RATES VARY WIDELY. The range in rates charged varied widely for a great many custom jobs. Rates can vary for several reasons: (1) competition for custom work in an area; (2) field conditions including size, shape and topography; (3) crop conditions and yields; (4) differences in type and size of equipment; (5) quality of work performed; (6) distance to job; and (7) speed at which operators adjust rates to current costs.

*See UMC Guide 303, "Estimating Custom Work Costs."

CUSTOM JOB PERFORMED	Basis of Charge	Most Common Rate	Average Rate	Range in Rates		Number Reporting
				Low	High	
TILLAGE:						
Plowing, moldboard:	Normal soil	Acre	\$10.00	\$9.49	\$3.33 - \$20.00	80
	Normal soil	Hour	30.00	25.75	18.00 - 30.00	4
	Heavy soil	Acre	10.00	11.27	5.00 - 25.00	54
Plowing, chisel plow:	Normal soil	Acre	8.00	7.79	2.86 - 15.00	77
	Normal soil	Hour	15.00	22.50	15.00 - 30.00	2
	Heavy soil	Acre	10.00	9.09	4.00 - 20.00	45
Plowing, disk plow:	Acre	10.00	8.87	5.00 - 20.00	30	
	Hour	15.00	26.00	15.00 - 45.00	5	
Disk only:	Acre	6.00	5.91	3.00 - 15.00	116	
	Hour	15.00 ¹	17.33	12.00 - 25.00	3	
Harrow only	Acre	3.00	3.58	2.00 - 5.00	17	
Disk with harrow attached:	Acre	6.00 ²	6.88	1.30 - 20.00	51	
	Hour	30.00	40.00	30.00 - 50.00	2	
Rotary hoe	Acre	4.00	3.82	1.00 - 6.95	36	
Cultivate rows	Acre	5.00	4.59	1.50 - 8.50	62	
Cultipack	Acre	6.00	5.34	2.00 - 8.00	25	
Cut stalks	Acre	5.00 ³	5.07	1.20 - 7.50	21	
PLANTING (Materials Not Included):						
Corn, Planting only:	Acre	6.00	6.24	3.00 - 12.00	88	
	Hour	15.00	15.00	15.00 - 15.00	1	
Planting + fertilizing	Acre	8.00	8.22	3.00 - 15.00	34	
Planting + fertilizer + weed or insect chemical	Acre	8.00	8.95	3.00 - 15.00	37	
No-till planting	Acre	10.00	9.38	5.00 - 15.00	50	
Soybeans: Plant only	Acre	5.00	6.82	3.00 - 16.50	103	
Small grain:	Drill only	Acre	5.00	6.54	3.00 - 21.00	84
	Drill + fertilize	Acre	10.00	8.13	1.25 - 15.00	17
	Drill + fertilize + other seed	Acre	9.00 ⁴	8.02	1.50 - 20.00	23

¹\$12.00 and \$25.00 reported an equal number of times.

²\$ 5.00 reported an equal number of times.

³\$ 6.00 reported an equal number of times.

⁴\$10.00 reported an equal number of times.

⁵\$3.50 reported an equal number of times.

⁶\$1.00 reported an equal number of times.

CUSTOM JOB PERFORMED	Basis of Charge	Most Common Rate	Average Rate	Range in Rates		Number Reporting
				Low	High	
FERTILIZER & CHEMICAL APPLICATION (Materials not included):						
RATES REPORTED BY FARMERS:						
Fert. Application: (includes labor & equipment)						
	anhydrous ammonia	Acre	\$5.00	\$5.49	\$3.00 -	\$8.50 25
	spreading fertilizer: Dry	Acre	3.00 ⁵	2.79	1.50 -	5.00 50
	Liquid	Acre	3.00	3.30	2.50 -	4.00 10
	combination liquid fert. + chemicals	Acre	3.50	3.79	2.75 -	6.00 12
	combined dry fertilizer application + seeding	Acre	3.00	3.80	2.00 -	8.00 27
Spraying Crops:	applying chem. with truck tractor-mounted or pulled sprayer	Acre	3.50	3.43	2.75 -	4.00 17
	Highboy sprayer	Acre	3.50	3.41	1.00 -	7.50 62
	Flotation sprayer	Acre	3.00	3.81	2.50 -	7.00 9
		Acre	3.50	3.63	3.50 -	4.00 4
RATES REPORTED BY AGRI-BUSINESS FIRMS:						
Complete Custom Application Service:						
	anhydrous ammonia:	Acre	6.00	5.65	3.00 -	8.50 33
		Ton	20.00	22.50	20.00 -	25.00 2
	dry fertilizer	Acre	3.00	2.76	.50 -	3.68 221
	liquid fertilizer	Acre	3.00	3.17	2.00 -	4.00 170
	comb. liq. fert. + chems.	Acre	3.50	3.31	2.15 -	5.00 170
	comb. dry fert. appl. + seeding	Acre	4.50	3.62	.50 -	7.00 177
Partial Application Services: (equipment rental)						
	anhydrous ammonia:	Acre	.50 ⁶	2.41	.30 -	10.00 22
		Ton	10.00	10.58	5.00 -	40.00 66
	dry fertilizer:	Acre	.50	1.04	.20 -	4.00 83
		Ton	4.00	4.13	1.00 -	8.00 80
	liquid fertilizer:	Acre	3.00 ⁷	1.98	.40 -	3.50 26
		Ton	5.00	4.55	2.50 -	8.00 10
	comb. liq. fert. + chems.:	Acre	3.00	2.06	.40 -	3.75 25
		Ton	4.00	4.75	3.00 -	8.00 4
Spraying Crops:	applying chems. with truck tractor mounted or pulled sprayer	Acre	3.50	3.45	2.00 -	6.00 156
	Highboy sprayer	Acre	3.50	2.76	.50 -	4.00 27
	Flotation sprayer	Acre	5.00 ⁸	4.07	3.00 -	5.00 23
		Acre	3.50	3.42	2.50 -	5.00 120
RATES REPORTED BY AERIAL APPLICATORS:						
	Spraying crops	Acre	4.00	3.92	2.50 -	5.50 32
	Spraying brush	Acre	5.00 ⁹	6.50	3.00 -	12.00 5
	Spraying brush + cost of chemicals	Acre	22.50	25.25	22.50 -	28.00 2
	Crop dusting	Acre	4.50	4.12	3.50 -	4.50 5
	Fertilizer spreading	Acre	6.00	5.08	3.00 -	6.50 11
	Seeding	Acre	3.00	4.46	2.00 -	7.50 19
	Defoliation of cotton	Acre	3.00	3.46	2.50 -	4.50 12
HARVESTING GRAIN AND SEED:						
Combining small grains:						
		Acre	20.00	19.73	12.00 -	25.00 105
		Bushel	.45	.45	.45 -	.45 1
Combining grass & other seed crops						
		Acre	20.00 ¹⁰	22.50	15.00 -	50.00 26
Combining soybeans: WITHOUT flex. cutter bar:						
		Acre	20.00	19.59	15.00 -	25.00 32
		Bushel	.60	.60	.60 -	.60 1
WITH flexible cutter bar:						
		Acre	20.00	21.99	14.00 -	30.00 87
		Bushel	.55 ¹¹	.64	.55 -	.75 5
Combining grain sorghum:						
	Straight charge:	Acre	20.00	20.46	12.00 -	30.00 71
		Bushel	.25	.25	.25 -	.25 1
	Combination charge:	Acre	15.00 ¹²	15.00	10.00 -	20.00 3
		Bushel	.06 ¹³	.07	.05 -	.10 3
	Minimum charge:	Bushel	.18 ¹⁴	.21	.18 -	.25 2
		Acre	20.00 ¹⁵	20.63	15.00 -	25.00 4
Combining corn:						
	Straight charge:	Acre	20.00	21.96	12.00 -	30.00 93
		Bushel	.20	.20	.20 -	.20 2
	Combination charge:	Acre	20.00	18.00	12.00 -	20.00 9
		Bushel	.05	.06	.03 -	.10 9
	Minimum charge:	Acre	20.00 ¹⁶	18.67	12.00 -	22.50 6
		Bushel	.12	.18	.12 -	.25 2

⁷\$1.00 & 3.50 reported an equal number of times.

⁸\$3.00 reported an equal number of times.

⁹\$3, 4.50, 8 & 12 reported an equal # of times.

¹⁰1/2 of seed is most common rate.

¹¹.75 reported an equal number of times.

¹²\$10.00 & \$20.00 reported an equal number of times.

¹³\$.05 and .10 reported an equal number of times.

¹⁴\$.25 reported an equal number of times.

¹⁵\$15, 22.50 & 25 reported an equal number of times.

¹⁶\$22.50 reported an equal number of times.

CUSTOM JOB PERFORMED	Basis of Charge	Most Common Rate	Average Rate	Range in Rates		Number Reporting	
				Low	High		
HARVESTING GRAIN, SEED, AND COTTON:(Continued)							
Picking corn (with picker)	Acre	\$20.00	\$18.33	\$15.00	-	\$20.00	3
Corn, pick, haul & crib:	Bushel	.20	.20	.20	-	.20	1
	Acre	25.00	30.00	25.00	-	35.00	2
Grain hauling	Bushel	.10 ¹⁷	.12	.01	-	.30	36
Grain hauling (field to farm)	Bushel	.10	.09	.03	-	.20	53
HARVESTING HAY:							
Mowing hay:	Acre	5.00	5.34	3.00	-	10.00	48
	Small bale	.10	.15	.10	-	.25	17
Hay conditioning, crushing or crimping:	Acre	7.00 ¹⁸	7.43	4.00	-	15.00	21
	Small bale	.20	.19	.10	-	.25	5
Mowing & conditioning:	Acre	7.00 ¹⁹	7.58	3.00	-	15.00	84
	Small bale	.25	.23	.15	-	.30	18
Mow, condition, windrow: Self-propelled	Acre	8.00	7.42	6.00	-	8.00	6
	Small bale	.30	.32	.30	-	.35	2
Raking hay:	Acre	3.00	3.11	1.00	-	10.00	60
	Small bale	.10	.10	.02	-	.15	46
	Ton	2.25	2.25	2.25	-	2.25	1
Baling hay: wire tie	Bale	.35	.34	.20	-	.50	36
(Square bale) twine tie	Bale	.30	.32	.15	-	.80	122
twine tie with bale thrower	Bale	.30	.52	.30	-	.75	2
small round-AC-bales	Bale	.30	.28	.20	-	.30	11
Hauling and storing bales	Bale	.30	.28	.20	-	.50	62
Complete hay harvest(mow, rake, bale, haul & store)	Small bale	.90	.85	.50	-	1.15	62
	Ton	40.00	40.00	40.00	-	40.00	1
LARGE PACKAGE MACHINES:							
Baling Hay: under 1,000 lbs.	Bale	5.00	5.85	3.00	-	11.00	43
(Round Bales) over 1,000 lbs.	Bale	6.00	6.32	4.00	-	18.00	141
Moving large bales	Bale	1.00	1.85	.50	-	8.00	61
Haystacking machine: under 2 tons	Stack	8.00	9.00	8.00	-	10.00	2
over 4 tons	Stack	40.00	40.00	40.00	-	40.00	2
Moving stacks	Stack	5.00	5.00	5.00	-	5.00	1
HARVESTING SILAGE:							
Corn silage: field chop only	Acre	25.00	30.00	25.00	-	40.00	7
	Ton	4.00	3.63	3.00	-	4.00	5
	Hour	50.00	41.43	20.00	-	60.00	7
Sorghum silage: field chop only	Acre	32.00 ²⁰	30.67	25.00	-	35.00	3
	Ton	4.00 ²¹	4.33	3.00	-	6.00	3
	Hour	50.00	50.00	50.00	-	50.00	1
Small grain or grass: field chop only	Acre	27.00	28.50	27.00	-	30.00	2
	Hour	50.00	55.00	50.00	-	60.00	2
Corn or sorghum silage Tower silo	Acre	55.00 ²²	53.33	45.00	-	60.00	3
(chop, haul & fill): Horizontal silo	Acre	60.00	54.00	25.00	-	75.00	5
	Ton	6.00 ²³	6.06	3.75	-	10.00	4
	Hour	55.00	60.00	55.00	-	65.00	2
Small grain & grass silage Horizontal silo	Acre	45.00	45.00	45.00	-	45.00	1
(chop, haul, & fill):	Hour	65.00	65.00	65.00	-	65.00	1
	Ton	10.00	10.00	10.00	-	10.00	1
PROCESSING GRAINS, FEED AND SEEDS:							
Corn shell from crib only	Bushel	\$.15	\$.15	\$.15	-	\$.15	1
Corn shell from crib & deliver	Bushel	.10	.16	.10	-	.30	4
Grind and mix grains: at farm (1-2 tons)	Ton	10.00	10.51	6.00	-	30.00	14
at farm (over 2 tons)	Ton	10.00	9.10	5.00	-	25.00	12
at elev. (1-2 tons)	Ton	7.00	7.83	4.00	-	16.00	124
at elev. (over 2 tons)	Ton	7.00	7.58	4.00	-	16.00	125
Grind hay at farm:	Ton	7.50	9.75	7.50	-	12.00	2
	Hour	12.50 ²⁴	14.17	10.00	-	20.00	3
	Small bale	.50 ²⁵	.54	.40	-	.80	4
Reclean grass seed	Cwt.	6.00 ²⁶	5.79	.40	-	10.50	37
Reclean clover seed	Cwt.	5.00	5.25	.40	-	12.00	45
Reclean soybeans or small grain	Bushel	.50	.57	.15	-	1.15	78
GRAIN DRYING:							
Charge for each 1% moisture removed	1% moist.	.03	.04	.01	-	.15	89
Shrinkage rate used in computing number of dry bushels of corn	% Gr. Wt.	1.5	1.4	1.0	-	2.5	80

¹⁷Distance limits varied.

¹⁸\$6.00 reported an equal number of times.

¹⁹\$6.00 reported an equal number of times.

²⁰\$25 & 35 reported an equal number of times.

²¹\$3 & \$6 reported an equal number of times.

²²\$45 & 60 reported an equal number of times.

²³\$3.75, 4.50 & 10 reported an equal number of times.

²⁴\$10 & \$20 reported an equal number of times.

²⁵\$.40, \$.45 & \$.80 reported an equal number of times.

²⁶\$5 reported an equal number of times.

CUSTOM JOB PERFORMED	Basis of Charge	Most Common Rate	Average Rate	Range in Rates		Number Reporting		
				Low	High			
MISCELLANEOUS FARM JOBS:								
Fence building & repairing	Hour	\$5.00	\$5.99	\$3.75	-	\$20.00	41	
Fence building: 4-barb wires, set posts	Hour	5.00	7.04	4.00	-	20.00	24	
	Rod	7.50 ²⁷	7.22	2.75	-	16.00	5	
	Hour	6.00 ²⁸	7.50	4.00	-	20.00	12	
	Rod	9.00 ²⁹	9.01	3.00	-	21.00	5	
Post hole digging:	Hole	.50 ³⁰	.72	.25	-	2.00	13	
	Hour	5.00	10.42	4.00	-	22.50	13	
Post driving:	Post	.20	.41	.10	-	1.00	9	
	Hour	15.00 ³¹	15.83	10.00	-	22.50	3	
Saw lumber from logs	100 Bd.Ft.	12.00	12.25	10.00	-	15.00	4	
Saw firewood: 2 ft. lengths with chainsaw	Hour	10.00 ³²	10.86	4.00	-	25.00	16	
	Cord	35.00	40.00	35.00	-	45.00	2	
Cutting brush with brush hog:	Acre	10.00	10.50	6.00	-	20.00	12	
	Hour	25.00	20.80	12.00	-	30.00	29	
Mowing weeds:	Acre	5.00	5.90	4.00	-	15.00	20	
	Hour	20.00 ³³	18.02	3.00	-	40.00	23	
Loading manure: Dry	Hour	20.00	18.77	6.00	-	50.00	13	
Loading & spreading liquid manure-knifed in	Hour	30.00	30.00	30.00	-	30.00	1	
Loading & spreading manure: Dry	Hour	20.00	19.25	7.00	-	25.00	8	
Load & spread liquid manure-broadcast	Hour	25.00	27.50	25.00	-	30.00	2	
Pumping lagoons with traveling gun	Hour	60.00	46.67	20.00	-	60.00	3	
WATER MANAGEMENT AND EARTH MOVING:								
Building terraces: conventional:	Cu.Yd.	.75	.84	.60	-	1.25	6	
	Ln.Ft.	.60	.57	.24	-	1.75	45	
	Hour	55.00	57.50	55.00	-	60.00	2	
parallel cut & fill:	Cu.Yd.	.75	.92	.75	-	1.20	4	
	Ln.Ft.	.60 ³⁴	.74	.35	-	1.75	51	
	Hour	55.00	57.50	55.00	-	60.00	2	
parallel with storage:	Cu.Yd.	.75 ³⁵	1.00	.75	-	1.25	5	
	Ln.Ft.	1.00	.85	.35	-	2.25	50	
	Hour	55.00	57.50	55.00	-	60.00	2	
diversion:	Cu.Yd.	.70 ³⁶	.80	.40	-	1.25	25	
	Ln.Ft.	1.00	.81	.40	-	1.10	22	
	Hour	55.00	57.50	55.00	-	60.00	2	
Building ponds and lakes:	Cu.Yd.	1.00	.99	.60	-	3.50	70	
	Hour	60.00 ³⁷	62.07	45.00	-	85.00	7	
Ditch construction:	Hour	55.00	61.67	45.00	-	80.00	6	
	Cu.Yd.	.80	.87	.60	-	3.50	32	
Land leveling:	Hour	55.00	59.06	45.00	-	75.00	8	
	Acre	300.00	300.00	300.00	-	300.00	1	
	Cu.Yd.	1.00	1.16	.70	-	3.50	15	
Land clearing:	Hour	60.00 ³⁸	65.03	45.00	-	200.00	43	
	Acre	400.00 ³⁹	473.62	150.00	-	2000.00	29	
EQUIPMENT CHARGES:								
Small bulldozer (under 100 h.p.)	Hour	50.00	46.57	30.00	-	60.00	20	
Medium bulldozer (100-150 h.p.)	Hour	60.00	57.19	45.00	-	80.00	71	
Large bulldozer (over 150 h.p.)	Hour	60.00	68.74	50.00	-	110.00	35	
Track-type loader:	under 100 h.p.	Hour	50.00	49.31	30.00	-	65.00	24
	over 100 h.p.	Hour	55.00	60.98	40.00	-	85.00	22
Motor grader:	under 100 h.p.	Hour	45.00	45.50	35.00	-	55.00	19
	over 100 h.p.	Hour	50.00	49.63	30.00	-	70.00	34
Dragline (1/2 to 3/4 cubic yards)	Hour	40.00	46.25	40.00	-	60.00	4	
Small scoop (10 yds. or less):	Hour	60.00	56.45	25.00	-	90.00	29	
	Cu.Yd.	.85	1.17	.85	-	1.50	2	
Large scoop (over 10 yards):	Hour	60.00	66.41	50.00	-	125.00	37	
	Cu.Yd.	.65	.72	.65	-	.80	2	
Tiling (trenching, laying, backfilling)-	Hour	45.00	47.50	30.00	-	70.00	4	
Tile not furnished:	Foot	.50	.52	.39	-	.80	24	
Trenching:	Hour	35.00	38.13	30.00	-	45.00	8	
	Foot	.35 ⁴⁰	.39	.11	-	.69	11	

²⁷\$2.75, \$3.50, \$6.35 & \$16 reported an equal number of times.
²⁸\$5 reported an equal number of times.
²⁹\$3, \$4.50, \$7.54 & \$21 reported an equal number of times.
³⁰\$.25 reported an equal number of times.
³¹\$10 & \$22.50 reported an equal number of times.
³²\$7 and \$8 reported an equal number of times.
³³\$15 reported an equal number of times.
³⁴\$.50 reported an equal number of times.

³⁵\$1.25 reported an equal number of times.
³⁶\$1 reported an equal number of times.
³⁷\$45, 52, 55, 57.50, 80 & 85 reported an equal number of times.
³⁸\$55 reported an equal number of times.
³⁹\$300 reported an equal number of times.
⁴⁰\$.50 reported an equal number of times.

■ Issued in furtherance of Cooperative Extension Work Acts of May 8 and June 30, 1914 in cooperation with the United States Department of Agriculture. John W. Oren, Director, Cooperative Extension Service, University of Missouri and Lincoln University, Columbia, Missouri 65211. ■ An equal opportunity institution.