

2009 Iowa Farm Custom Rate Survey

Many Iowa farmers hire some custom machine work in their farm business, or perform custom work for others. Others rent machinery or perform other services. The information below is based on a survey of 255 Iowa farmers, custom operators, and farm managers. For each operation, the average rate from the survey and the range are shown. Twenty-eight percent of the respondents perform custom work, 17 percent hire work done, and 55 percent indicate doing both.

Values below are rates expected to be charged or paid, including fuel and labor. The average price for diesel fuel was assumed to be \$2.50 per gallon. This rate schedule is intended only as a guide. Actual custom rates may vary according to availability of machinery in a given area, timeliness, operator skill, field size and shape, crop conditions, and the performance characteristics of the machine being used. Machinery rental rates can be estimated on the back.

Tillage

	Average	Range
Chopping cornstalks, / acre	\$9.80	4.00 - 18.00
Moldboard plowing, / acre	14.10	10.00 - 20.00
Chisel plowing, / acre	13.70	8.00 - 20.00
Disk/chiseling, / acre	14.30	8.00 - 20.00
Subsoiling (8 to 15 in. deep), / acre	16.50	9.00 - 25.00
V-ripping (over 15 in. deep), / acre	16.70	10.00 - 25.00
V-ripping with tandem disk, / acre	17.50	10.00 - 25.00
Disking, tandem, / acre	11.40	7.00 - 20.00
Disking, offset, / acre	13.30	10.00 - 17.00
Harrowing, / acre	7.60	3.50 - 12.00
Soil finishing, / acre	11.20	5.00 - 15.00
Field cultivating, / acre	10.70	5.00 - 18.00
Rock picking, / acre	11.70	3.50 - 17.00
Cultivating, / acre	9.30	6.00 - 15.00
Cultivating, ridge-till, / acre	11.50	7.00 - 18.00
Rotary hoeing, / acre	7.20	4.00 - 12.00
Land rolling, / acre	7.90	4.00 - 12.00

Planting

Planting - w/ fert & insect. attach., / a.	\$14.70	9.00 - 19.50
- without attachments, / acre	14.10	9.80 - 21.00
- w/ splitters & attach., / acre	15.90	10.80 - 22.00
- no-till planter, / acre	15.80	10.00 - 25.00
- no-till planter w/ splitters, / a.	17.60	13.00 - 25.00
- ridge till planter, / acre	16.40	12.80 - 20.00
Drilling soybeans, / acre	14.20	10.00 - 18.00
Drilling soybeans, no-till, / acre	15.10	9.00 - 20.00
Drilling small grain, / acre	13.10	9.00 - 18.00
Seeding grass, broadcast with tractor, / a.	9.00	6.00 - 11.00
Seeding grass, broadcast with ATV, / acre	10.00	5.00 - 14.00

Spraying (materials not included)

Ground, broadcast, tractor, / acre	\$6.00	3.00 - 9.00
Ground, incorporated, tractor, / acre	11.20	6.00 - 15.00
Ground, broadcast, s. propelled, / acre	6.30	3.80 - 10.00
Ground, banded, tractor, / acre	6.90	5.00 - 10.00
Ground, road ditches, / hour	48.40	15.00 - 75.00
Aerial, / acre	8.00	5.00 - 10.50

Fertilizer Application (materials not included)

Dry bulk - applied, / acre	\$4.10	2.00 - 6.50
- strip-till, / acre	14.50	10.00 - 18.00
Liquid - spraying, / acre	5.80	4.00 - 8.00
- strip-till, knifed, / acre	12.30	5.00 - 18.00
Anhydrous - injecting, w/ tool bar, / acre	9.50	5.00 - 17.00
- injecting, w/o tool bar, / acre	8.90	5.00 - 14.00
Spreading lime, / ton	7.00	3.00 - 15.00

Harvesting, Drying, and Storing Grain

	Average	Range
Corn combining, / acre	\$29.70	20.00 - 48.00
- with chopper head, / acre	33.50	26.00 - 44.00
Soybean combining, / acre	28.70	20.00 - 48.00
- with air reel, / acre	29.30	22.50 - 36.00
Small grain combining, / acre	26.50	18.00 - 35.00
Complete harvesting (combine, cart, haul to farm storage)		
- Corn, / acre	39.20	25.00 - 55.00
- Soybeans, / acre	35.30	25.00 - 50.00
Added charge for GPS mapping, / acre	2.10	0.50 - 5.00
Picking ear corn, / acre (seed corn)	38.30	28.00 - 50.00
Picking ear corn, / acre (farm use)	26.60	12.00 - 40.00
Drying corn (includes fuel, electricity, labor)		
- continuous flow dryer (/ point / bu.)	0.048	0.030 - 0.070
- bin dryer (/ point / bu.)	0.047	0.030 - 0.070
Bin dryer rental (/ bu.) no fuel or labor	0.081	0.036 - 0.150
Handling grain by auger, / bu.	0.057	0.020 - 0.140
Storing grain, bin rental / bu. / month	0.024	0.010 - 0.050
Storing grain, bin rental / bu. / year	0.145	0.070 - 0.250
Hauling grain		
- in field, grain cart, corn / acre	5.60	2.00 - 10.00
- in field, grain cart, soybeans / acre	4.50	1.00 - 10.00
- to farm storage, wagon, / bu.	0.065	0.020 - 0.120
- farm storage to mkt., wagon, / bu.	0.086	0.023 - 0.150
- to mkt., truck, / bu., (5 mi. 1-way)	0.091	0.050 - 0.150
- to mkt., truck, / bu., (25 mi. 1-way)	0.151	0.080 - 0.220
- to mkt., truck, / bu., (100 mi. 1-way)	0.288	0.160 - 0.400

Harvesting Forages

Hay - mowing, / acre	\$10.20	6.00 - 14.00
- conditioning, / acre	10.40	8.00 - 14.00
- mowing/conditioning, / acre	12.10	7.50 - 17.00
- raking, / acre	5.70	1.50 - 10.00
- windrowing, / acre	11.80	10.00 - 15.00
Hay baling - small square, / bale	0.50	0.25 - 0.75
- large square, / bale	9.40	7.00 - 12.00
- large round w/o wrap, / bale	9.70	7.00 - 14.00
- large round with wrap, / bale	10.80	8.00 - 16.00
Straw or corn stalk baling		
- large round or square / bale	11.70	8.00 - 15.00
Moving round bales to storage, / bale	3.00	1.30 - 5.00
Hauling round bales, / bale, / loaded mile	0.17	0.12 - 0.18
Silage - chopping, / hr., / row	34.50	25.00 - 50.00
- chop, haul, fill upright, /hr., /row	36.80	11.30 - 50.00
Haylage - chopping, / hr., / ft. head width	12.50	6.70 - 17.10
Earlage - chopping, / acre	37.80	35.00 - 50.00
Mowing CRP or pasture, / acre	14.10	8.00 - 27.00
Mowing fence rows, ditches, / hour	57.30	35.00 - 85.00
Chopping brush, / acre	17.80	13.00 - 20.00

Miscellaneous Services

	Average	Range
Removing snow (loader), / hour	\$71.60	45.00 - 100.00
Removing snow (blade), / hour	71.00	40.00 - 110.00
Removing snow (blower), / hour	80.60	50.00 - 110.00
Grinding, mixing feed, / ton	9.80	5.00 - 15.00
Spreading liq. manure, inject., / 1000 gal.	11.10	7.50 - 15.00
Liquid manure w/ drag line, / 1000 gal.	10.90	9.00 - 13.00
Loading solid manure, / hour	73.00	20.00 - 120.00
Loading, spreading solid manure, / hour	95.70	30.00 - 140.00
Power washing, / hour	33.30	20.00 - 50.00
Building fence, barb, / hr. (no materials)	16.70	10.00 - 22.00
Building fence, barb, / rod (no materials)	10.50	8.00 - 14.00
Building fence, woven, / hr. (no materials)	16.30	13.00 - 21.00
Building fence, woven, / rod (no materials)	9.50	8.00 - 11.00
Scouting crops, / acre	4.20	1.50 - 7.00
Soil testing, / sample	8.80	3.00 - 15.00
GPS grid soil testing, / acre	7.10	2.30 - 10.00
Managing stored grain, / bu.	0.05	0.01 - 0.10
Shearing sheep, / head	2.80	2.00 - 3.15
Livestock hauling with trailer, / loaded mile	2.60	1.50 - 4.00
Livestock hauling with truck, / loaded mile	3.00	2.40 - 3.80
Bulldozing, / hr. / ft. of blade	11.50	7.80 - 15.00
Digging post holes, / hole	3.60	1.00 - 5.00
Driving steel fence posts, / post	2.70	2.00 - 4.00
Driving wooden fence posts, / post	4.10	3.00 - 5.00
Building terraces, / foot	1.43	1.40 - 1.50
Trenching, / foot	1.18	1.00 - 1.50
Tiling (ex. materials), / foot	0.94	0.40 - 2.00
Back hoeing, / hour	78.50	45.00 - 125.00
Clearing land, / hour	112.50	90.00 - 130.00
Building ponds, / hour	112.10	100.00 - 130.00
Chain sawing, / hour	31.10	12.00 - 50.00
Welding machinery, / hour	41.90	20.00 - 60.00
Using truck scale, / load	2.40	1.00 - 5.00

Machine Rental (operator, tractor, and fuel not included)

	Average	Range
Tractor, / horsepower, / hour	\$0.20	0.13 - 0.30
Grain drill, / acre	9.10	4.00 - 13.00
No-till soybean drill, / acre	10.60	8.00 - 15.00
Corn head for combine, / acre	8.00	6.00 - 10.50
Soybean head for combine, / acre	7.30	5.00 - 10.00
Grain cart with auger, corn, / acre	4.80	3.00 - 7.50
Grain cart with auger, soybeans, / acre	4.30	2.00 - 7.00
Grain wagon, / bu.	0.08	0.05 - 0.14
Grain truck (semi), / bu. / trip	0.12	0.07 - 0.16
Grain auger, / bu.	0.05	0.02 - 0.08
Grain vacuum, / bu.	0.08	0.05 - 0.14
Grain cleaner, / bu.	0.08	0.07 - 0.10
Liquid manure spreader, / hour	27.00	23.00 - 34.00
Solid manure spreader, / hour	31.20	30.00 - 35.00
Skid loader, / hour	50.70	20.00 - 80.00
Dry bulk fertilizer applicator, / acre	1.80	1.00 - 2.50
Liquid fertilizer applicator, / acre	3.40	2.00 - 5.00
Anhydrous fertilizer applicator, / acre	4.10	1.50 - 9.50
Power washer, / hour	28.60	20.00 - 40.00
Tub grinder, / hour	210.10	100.00 - 400.00

Custom Farming (tillage, planting, pest control, and harvesting)

Corn, / acre	\$100.20	60.00 - 144.00
Soybeans, / acre	89.80	50.00 - 139.00
Small grain, / acre	79.50	60.00 - 100.00

Farm Labor Wages for Operating Machinery

Spraying or harvesting, / hour	\$13.00	9.00 - 25.00
Other operations, / hour	12.30	8.00 - 20.00

Estimating Machinery Rental Rate

Example:
Tandem Disk

1. Custom charge (includes labor, fuel, tractor)	\$ _____/acre	\$11.40
2. Percent of custom charge which is for interest, insurance, depreciation, and repairs (excluding fuel and labor) (use 70% for tillage, 80% for planting and harvesting)	_____%	70%
3. Rental value, including tractor (1 x 2)	\$ _____/acre	\$7.98
4. Tractor rental value, if tractor is not provided: $\frac{\text{HP} \times \$ \text{ per hp-hour rental rate (see above)}}{\text{Ex: } 150 \text{ HP} \times \$0.20 \text{ (per hp-hour rental rate)}} \div \text{acres/hour} =$	\$ _____/acre	\$2.00
5. Implement rental value, without tractor (3 minus 4)	\$ _____/acre	\$5.98/acre

... and justice for all

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File: Economics 1 - 1

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Farm Machinery Economics
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