

2016 Iowa Farm Custom Rate Survey

Many Iowa farmers hire custom machine work in their farm business, or perform custom work for others. Some farmers rent machinery or perform other services. The information below is based on a survey of 182 Iowa farmers, custom operators, and farm managers. Eighteen percent of the respondents perform custom work, 14 percent hire work done, 43 percent indicated doing both, 3 percent indicated doing none, and 22 percent did not indicate whether they perform or hire custom work.

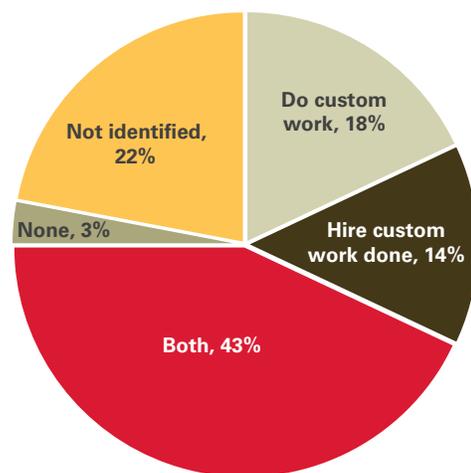
For each operation, the average rate from the survey, the median, the range, and the responses are shown. The average is calculated as the simple average of all responses. The median is the response that splits all the ordered responses (from smallest to largest) in half. The reported range consists of the second-lowest value and the second-highest value in the sample.

The values in the table below are rates expected to be charged or paid, including fuel and labor. The average price for diesel fuel was assumed to be \$2.00 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. Rental rates for some machinery items are shown in the last section of this report, along with a worksheet for estimating rental rates on other items.

Note: All rates include fuel, repairs, depreciation, interest, labor, and all other machinery costs for the tractor and implement.

Total Number of Responses = 182



Tillage	Average Charge	Median Charge	Range	Number of Responses
Chopping cornstalks, / acre	\$11.85	\$11.90	\$7.00 - \$19.00	53
Moldboard plowing, / acre	18.80	19.00	12.00 - 25.00	27
Chisel plowing, / acre	16.45	16.00	12.00 - 22.75	44
Disk/chiseling, / acre	17.80	16.75	10.00 - 25.00	54
Vertical tillage, / acre	16.05	16.70	8.00 - 21.00	58
Subsoiling (8 to 15 in. deep), / acre	20.35	20.00	15.00 - 27.50	44
V-ripping (over 15 in. deep), / acre	20.15	20.00	12.00 - 30.00	36
V-ripping with tandem disk, / acre	23.15	23.25	14.00 - 35.00	62
Disking, tandem, / acre	14.25	14.80	8.00 - 20.35	76
Disking, heavy or offset, / acre	18.45	18.00	13.00 - 25.50	31
Harrowing or dragging, / acre	8.95	9.00	5.00 - 13.00	23
Soil finishing, / acre	14.00	14.00	10.00 - 18.00	59
Field cultivating, / acre	14.05	14.10	8.00 - 21.00	87
Rock picking, / acre	14.90	15.00	10.00 - 20.00	20
Cultivating, conventional, / acre	13.50	14.50	8.00 - 20.00	31
Cultivating, ridge-till, / acre	16.45	16.40	11.50 - 22.75	14
Rotary hoeing, / acre	10.65	11.00	5.00 - 15.00	37
Land rolling, / acre	7.45	7.00	5.00 - 12.00	54

Planting, Drilling, and Seeding	Average Charge	Median Charge	Range	Number of Responses
Planting				
- with fertilizer & insecticide attachments, / acre	\$19.90	\$20.00	\$12.00 - \$30.00	75
- without attachments, / acre	18.55	18.00	12.00 - 28.00	78
- with splitters & attachments, / acre	20.70	21.00	12.00 - 32.00	46
- no-till planter, / acre	20.15	20.00	12.00 - 33.50	78
- no-till planter with splitters, / acre	20.85	21.00	15.00 - 30.00	49
- ridge till planter, / acre	22.40	22.00	17.00 - 29.00	14
Extra charge for seed shut-offs, / acre	2.30	2.50	0.00 - 5.00	64
Extra charge for variable rate seeding, / acre	2.70	3.00	0.00 - 5.00	51
Seed tender, / acre	3.15	3.50	0.00 - 6.00	46
Drilling soybeans, / acre	16.40	15.50	12.00 - 23.00	35
Drilling soybeans, no-till, / acre	18.40	18.25	13.00 - 28.00	54
Drilling grass seed, / acre	16.40	16.00	10.00 - 25.00	43
Drilling small grain, / acre	16.10	16.00	10.00 - 22.00	31
Seeding grass, broadcast with tractor, / acre	12.25	12.00	8.00 - 15.00	20
Seeding grass, broadcast with ATV, / acre	14.70	14.90	8.00 - 20.00	18

Spraying (materials not included)

Ground, broadcast, tractor, / acre	\$6.80	\$6.50	\$5.00 - \$10.10	60
Ground, incorporated, tractor, / acre	11.80	11.15	6.50 - 20.00	21
Ground, broadcast, self propelled, / acre	7.35	7.00	5.00 - 15.00	111
Ground, banded, tractor, / acre	10.95	11.00	8.00 - 13.65	12
Ground, road ditches, / hour	63.70	65.00	20.00 - 90.00	38
Aerial, / acre	10.60	10.00	7.00 - 15.00	40

Fertilizer Application (materials not included)

Dry bulk - applied, / acre	\$4.90	\$5.00	\$2.00 - \$8.00	57
- strip-till, / acre	17.15	17.00	7.00 - 25.00	21
Liquid - spraying, / acre	6.65	6.50	4.00 - 11.00	35
- strip-till, knifed, / acre	15.10	15.00	12.00 - 21.00	13
- side dressing, / acre	11.15	12.00	6.00 - 15.00	33
Anhydrous - injecting, with tool bar, / acre	12.25	12.00	7.00 - 20.00	82
- injecting, without tool bar, / acre	11.10	11.00	7.00 - 18.00	48
Spreading lime, / ton	6.35	6.50	3.00 - 11.30	31

Harvesting, Drying, and Hauling Grain	Average Charge	Median Charge	Range	Number of Responses
Corn combining, / acre	\$34.75	\$35.00	\$23.00 - \$55.00	121
- with chopper head, / acre	40.10	39.50	26.00 - 57.00	64
Soybean combining, / acre	34.05	34.00	25.00 - 52.00	108
- with air reel, / acre	35.55	34.50	28.00 - 50.00	28
- with draper head, / acre	38.10	38.35	29.00 - 50.00	63
Small grain combining, / acre	31.55	30.00	25.00 - 40.00	18
Complete harvesting (combine, grain cart, haul to farm storage)				
- Corn, / acre	49.70	50.00	30.00 - 85.00	62
- Soybeans, / acre	46.40	47.00	30.00 - 70.00	60
Added charge for GPS mapping, / acre	2.45	2.50	0.00 - 5.00	49
Picking ear corn (seed corn), / acre	36.85	37.00	34.00 - 39.00	7
Picking ear corn (farm use), / acre	29.95	29.50	25.00 - 35.00	12
Drying corn (includes fuel, electricity, labor)				
- continuous flow dryer, / point per bushel	0.047	0.050	0.018 - 0.070	23
- bin dryer, / point per bushel	0.054	0.054	0.040 - 0.070	10
Handling grain by auger, / bushel	0.061	0.060	0.010 - 0.100	56

Harvesting, Drying, and Hauling Grain (cont.)	Average Charge	Median Charge	Range	Number of Responses
Hauling grain				
- grain cart, corn, / acre	\$6.45	\$6.25	\$2.00 - \$11.00	69
- grain cart, soybeans, / acre	5.70	6.00	2.00 - 10.00	68
- to farm storage, wagon, / bushel	0.071	0.070	0.020 - 0.140	40
- farm storage to market, wagon, / bushel	0.087	0.080	0.050 - 0.150	33
- to market, truck, (5 miles, 1-way trip), / bu.	0.099	0.100	0.050 - 0.180	71
- to market, truck, (25 miles, 1-way trip), / bu.	0.163	0.150	0.100 - 0.300	63
- to market, truck, (100 miles, 1-way trip), / bu.	0.325	0.327	0.120 - 0.510	30
Harvesting Forages				
Hay - mowing, / acre	\$12.30	\$12.00	\$6.00 - \$18.00	32
- conditioning, / acre	11.70	11.00	10.00 - 14.00	15
- mowing/conditioning, / acre	14.00	14.00	8.00 - 21.00	36
- raking, / acre	6.55	6.65	3.00 - 10.00	38
- windrowing, / acre	14.20	14.05	11.00 - 17.00	14
- tedding, / acre	7.20	7.00	5.00 - 10.00	19
Swathing hay or small grain, / acre	13.20	13.50	12.00 - 13.75	7
Hay baling - small square bales, / bale	0.66	0.70	0.35 - 1.00	28
- large square bales, / bale	9.75	10.00	8.00 - 12.00	17
- large round bales without wrap, / bale	10.70	10.50	8.00 - 14.00	21
- large round bales with wrap, / bale	12.35	12.50	9.00 - 16.00	51
Straw or corn stalk baling				
- large round or square bales w/o wrap, / bale	12.05	12.00	10.00 - 14.00	17
- large round or square bales with wrap, / bale	13.70	13.50	11.00 - 16.00	38
Picking up with accumulator, / large square bale	3.30	3.00	3.00 - 4.00	7
Moving large round bales to storage, / bale	2.85	2.90	1.75 - 4.00	14
Moving large square bales to storage, / bale	3.05	3.00	2.50 - 3.15	9
Hauling rd bales by truck or trailer, / bale, / loaded mile	0.09	0.03	0.01 - 0.19	10
Silage - chopping, / hour, / head row				
- chopping, / ton	44.60	28.75	13.33 - 100.00	8
- chopping, haul, fill silo, / hour, / head row	7.10	7.00	5.00 - 10.00	10
- chopping, haul, fill silo, / ton	67.15	30.00	16.67 - 133.33	5
- chopping, haul, fill silo, / ton	8.45	8.50	7.50 - 9.25	9
Filling silage bags, / foot of bag	11.00	11.00	9.00 - 13.00	7
Haylage - chopping, / ton	9.10	9.00	7.50 - 11.25	9
Earlage or snaplage - chopping, / acre	54.50	55.00	42.00 - 65.00	11
Custom Farming (tillage, planting, pest control, harvesting, and hauling to farm, no drying)				
	Average Charge	Median Charge	Range	Number of Responses
Corn, / acre	\$129.95	\$130.00	\$70.00 - \$190.50	59
Soybeans, / acre	116.15	115.00	60.00 - 170.00	57
Small grain, / acre	93.55	92.50	80.00 - 110.00	12
Farm Labor Wages for Operating Machinery				
	Average Charge	Median Charge	Range	Number of Responses
Spraying or harvesting, / hour	\$16.60	\$16.00	\$11.00 - \$25.00	81
Other operations, / hour	15.05	15.00	10.00 - 20.00	85

Miscellaneous Services (labor, fuel, and equipment included)	Average Charge	Median Charge	Range	Number of Responses
Removing snow (loader), / hour	\$78.10	\$75.00	\$35.00 - \$110.00	43
Removing snow (blade), / hour / foot of blade	5.35	5.85	0.88 - 9.38	14
Removing snow (blower), / hour / foot of blower	10.30	12.50	1.38 - 17.00	21
Grinding, mixing feed, / ton	10.60	10.50	9.75 - 11.50	8
Tub grinding hay, / hour	208.85	200.00	180.00 - 250.00	11
Spreading liquid manure, injected, / 1000 gal.	13.30	13.50	10.00 - 17.00	22
Applying liquid manure w/ drag line, / 1000 gal.	12.65	11.65	9.50 - 17.00	14
Loading solid manure, / hour	77.60	75.00	60.00 - 110.00	13
Loading, spreading solid manure, / hour	120.25	120.00	100.00 - 150.00	13
Power washing, / hour	43.25	42.00	35.00 - 50.00	19
Building fence, barbed (no materials), / hour	15.60	15.00	14.80 - 18.00	7
Building fence, barbed (no materials), / rod	15.00	14.50	11.00 - 18.00	10
Building fence, woven (no materials), / hour	17.45	16.50	15.00 - 20.00	7
Building fence, woven (no materials), / rod	15.35	14.75	11.00 - 20.00	8
Scouting crops, / acre	4.25	4.00	2.00 - 7.45	26
Scouting crops with drone, / acre	2.60	2.25	1.00 - 4.00	6
Soil testing, / sample	5.60	6.00	2.50 - 7.00	12
GPS grid soil testing, / acre	7.20	7.00	4.00 - 10.00	22
Managing stored grain, / bushel	0.06	0.05	0.01 - 0.10	19
Vacuuming grain, / bushel	0.09	0.08	0.02 - 0.15	33
Shearing sheep, / head	3.70	3.50	3.00 - 4.00	9
Livestock hauling with trailer, / loaded mile	2.90	2.95	2.00 - 4.00	13
Livestock hauling w/ straight truck, / loaded mile	3.35	3.45	2.75 - 4.00	8
Livestock hauling with semi truck, / loaded mile	3.75	3.80	3.50 - 4.00	12
Bulldozing, / hour, / foot of blade	12.45	12.15	7.08 - 18.00	20
Digging post holes, / hole	3.70	3.55	3.00 - 5.00	10
Driving steel fence posts, / post	2.60	2.50	2.00 - 4.00	11
Driving wooden fence posts, / post	3.85	4.00	3.00 - 5.00	11
Building terraces, grassed back, / foot	3.15	3.15	2.75 - 3.50	12
Building terraces, narrow base, / foot	2.55	2.50	2.00 - 3.00	9
Trenching, / foot	1.40	1.45	0.75 - 2.00	16
Tiling, tiling machine (excluding materials), / foot	1.10	1.15	0.50 - 2.00	22
Tiling, tile plow (excluding materials), / foot	0.72	0.75	0.30 - 1.05	24
Back hoeing, / hour	94.45	95.40	50.00 - 150.00	32
Clearing land, / hour	133.70	138.65	95.00 - 175.00	16
Building ponds, / hour	147.05	145.00	133.10 - 175.00	14
Chain sawing, / hour	57.85	60.00	25.00 - 75.00	19
Welding machinery, / hour	52.15	50.00	30.00 - 75.00	26
Mowing CRP or pasture, / acre	17.45	16.00	12.00 - 25.00	42
Mowing fence rows, ditches, / hour	68.75	70.00	25.00 - 100.00	42
Mowing lawns, / hour	38.55	40.00	18.00 - 60.00	31
Chopping brush, / acre	33.95	31.00	25.00 - 50.00	16
Using truck scale, / load weighed	5.60	4.75	2.00 - 10.00	14
Bin Rental	Average Charge	Median Charge	Range	Number of Responses
Bin dryer, / bushel dried, (no fuel or labor)	\$0.074	\$0.069	\$0.040 - \$0.150	12
Storing grain, bin rental, / bushel / month	0.024	0.020	0.015 - 0.040	20
Storing grain, bin rental, / bushel / year	0.159	0.150	0.090 - 0.300	36

Machine Rental (operator, tractor, and fuel not included)	Average Charge	Median Charge	Range	Number of Responses
Tractor, / horsepower, / hour	\$0.22	\$0.20	\$0.10 - \$0.33	22
Grain drill, / acre	10.50	10.00	8.00 - 15.00	12
No-till soybean drill, / acre	12.30	12.00	9.00 - 18.00	13
Corn head for combine, / acre	9.85	9.05	5.00 - 15.00	17
Soybean head for combine, / acre	9.40	10.00	6.00 - 13.25	16
Grain cart with auger, corn, / acre	6.70	6.50	4.50 - 10.00	15
Grain cart with auger, soybeans, / acre	6.00	5.60	4.00 - 8.20	14
Grain wagon, / bushel	0.08	0.08	0.04 - 0.12	11
Grain truck (semi), / bushel, / round trip	0.12	0.11	0.07 - 0.19	13
Grain auger, / bushel	0.06	0.06	0.05 - 0.08	10
Grain vacuum, / bushel	0.08	0.08	0.02 - 0.12	19
Grain cleaner, / bushel	0.08	0.08	0.07 - 0.08	7
Liquid manure spreader, / hour	38.65	40.00	30.00 - 45.00	7
Solid manure spreader, / hour	45.35	42.90	35.00 - 50.00	8
Skid loader, / hour	57.70	55.05	20.00 - 85.00	20
Dry bulk fertilizer applicator, / acre	3.70	3.75	2.00 - 5.00	14
Liquid fertilizer applicator, / acre	4.95	5.20	3.50 - 6.00	8
Anhydrous fertilizer applicator, / acre	4.80	5.00	2.00 - 8.00	19
Power washer, / hour	41.65	42.55	30.00 - 50.00	10
Generator, / hour	44.35	45.25	38.75 - 50.00	9
Tub grinder, / hour	199.20	200.00	150.00 - 220.00	9

Estimating a Machinery Rental Rate for Items Not Surveyed

Example:
Tandem Disk

The following worksheet can be used to estimate a rental value for equipment items not shown above.

1. Custom charge (includes labor, fuel, tractor)	\$ _____/acre	\$14.25
2. Percent of custom charge that is for interest, insurance, depreciation, and repairs (excluding fuel and labor) (use 60% for tillage, 65% for planting and harvesting)	x _____%	x 60%
3. Rental value, including tractor (1 x 2)	= \$ _____/acre	= \$8.55
4. Tractor rental value, if tractor is not provided: _____ HP x \$ _____ per hp-hour rental rate (see above) / _____ acres/hour ^{1/} =	- \$ _____/acre	- \$2.18
Ex: 150 HP x \$.22 (per hp-hour rental rate) / 15 acres/hour = \$2.18		
5. Implement rental value, without tractor (3 minus 4)	= \$ _____/acre	= \$6.37/acre

^{1/} Typical values for acres covered per hour can be found in AgDM File A3-24, [Estimating the Field Capacity of Farm Machines](#)

... and justice for all

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and July 30, 1914, in cooperation with the U.S. Department of Agriculture. Cathann A. Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

Prepared by

Alejandro Plastina, extension economist
plastina@iastate.edu
Ann Johans, extension program specialist
Joni Erwin, student assistant

Additional machinery management publications are available at:
www.extension.iastate.edu/agdm
store.extension.iastate.edu/