



Rates for Custom Work in Michigan

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Custom hire of machine services may be viewed as an economically desirable alternative for many farmers. For farmers having a relatively small land base and/or limited labor availability, hiring-in of machine services enables these farmers to employ modern machine technology at a cost that may be lower than owning and operating their own machines. For farmers who own machines, custom hiring-out the machine is a way to lower its cost per unit of production. For example, by custom hiring-out a machine, the machine ownership costs of depreciation, insurance, and interest are distributed over more acres and usually results in a lower machine ownership cost per acre.

Farmers involved in custom hire often have difficulty in determining a fair charge for both the machine owner and the machine hirer. The market for machine services may not be well established. The machine custom-hire rates reported on the following pages can be used as an indicator or guide, but not as an absolute in establishing a fair charge. The range of rates for the state is quite large. The variability of the rates may be partially attributed to lack of knowledge and differences in topography, climate, soil conditions, field size, location, equipment size and conditions, timeliness, plus services and skills performed by a particular machine or operator.

The price data were gathered in March-April 1977 from selected Michigan farmers. The usable responses numbered 389 and are distributed throughout Michigan and its nine crop reporting districts as indicated in Figure 1.

Part I, Table 1 presents the custom-hire cost data for the state and for each of the nine crop reporting dis-

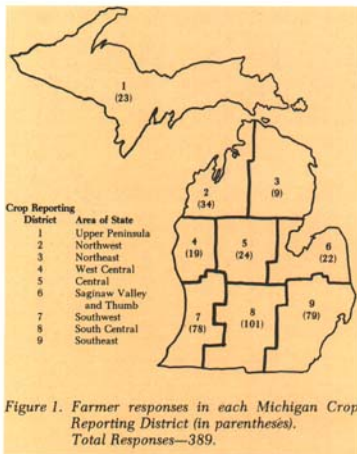


Figure 1. Farmer responses in each Michigan Crop Reporting District (in parentheses).
Total Responses—389.

tricts. The number of Michigan farmers reporting each custom-hire service is given as is the most frequently reported rate(s) and the average rate for the state and each crop reporting district. A blank indicates that the information available was inadequate to report because of insufficient number of responses. This is due to misunderstanding of the information requested or because such services are not used in the particular area.

Part II suggests a technique for figuring the custom rate charge necessary to cover machinery ownership and operating expenses. A more basic question that should be asked and answered is whether machinery should be owned or custom hired. Items that might influence your decision on machinery purchase versus custom hire include availability of custom hire and its timeliness, performance of machine, income tax management utilizing investment tax credit and depreciation expense, plus alternative uses of dollars that might be invested elsewhere.



PART I, TABLE 1. CUSTOM RATES IN MICHIGAN*

CUSTOM RATE SURVEY				CROP REPORTING DISTRICT								
I. HIRED LABOR				1	2	3	4	5	6	7	8	9
No. Reported	State	Ave. Range	Most Frequent	Average	Average	Average	Average	Average	Average	Average	Average	Average
(1/HR)	(2/HR)	(1.70-5.00)	(40)	2.51	2.78	2.48	2.54	2.54	2.68	2.75	2.67	2.74
293			2.50	435.00	556.07	567.67	537.00	693.00	700.00	690.03	726.41	879.79
147		150.00-1100.00	480.00									
			600.00									
			800.00									
(3) Furnished Full-time Labor with: Number that Reported Supplied												
House	150	88										
Meat	70											
Medical Insurance	150	64										
II. CUSTOM FARMING RATE (Includes all machine and labor activities necessary to grow and harvest 1 acre.) Most Frequent (number)												
CROP (\$/Acre)	No. Reported	State Ave. Range	Most Frequent	44.00	45.67	26.00	95.00	100.00	26.50	39.63	58.52	50.73
(1) Corn	87	30.88 11.00-140.00	15.00									
			35.00									
			40.00									
			60.00									
(2) Soybeans (\$/Acre)	30	36.73 10.00-115.00	30.00									
			46.00									
(3) Small Grains (\$/Acre)	51	32.96 8.00-105.00	30.00	12.17	17.50	21.50	60.00	35.00	26.67	37.77	40.40	34.20
(4) Forage (\$/Acre)	14	62.79 9.00-90.00	60.00	9.00	27.00	22.50				45.00	73.33	67.25
III. EQUIPMENT RENTAL RATES												
(1) Tractor Only (\$/Hr)	126	13.91		8.95	11.00	16.00	11.57	18.57	8.33	12.56	15.04	15.91
All sizes												
80 HP	10	12.50										
100	30	11.43										
150	10	14.80										
175	15	21.00										

* Except where noted, the reported charge should include use of machine, tractor for pull-type machines, fuel, and the machine operator or usual crew.

Part I, Table 1. Custom Rates in Michigan, Continued.

CUSTOM RATE SURVEY	No. Reported	State Average (\$ / Acre)	CROP REPORTING DISTRICT								
			1	2	3	4	5	6	7	8	9
(2) Plowing (a) Moldboard All sizes	169	8.83	8.19	11.71	8.60	7.79	7.75	9.40	8.46	9.68	8.12
3	12	8.46									
4	10	8.74									
5	50	8.57									
6	54	9.07									
7	15	9.53									
8	11	8.50									
(b) Chisel All Sizes	34	6.34	4.25	8.33	7.50	6.50	4.23	7.00	6.02	7.05	5.50
(3) Disking All Sizes	88	4.39	4.43	9.40	3.67	4.80	3.46	2.50	3.79	4.53	3.74
(4) Harrowing (Dragging) All Sizes	56	3.50	3.56	11.00	2.50	3.00	2.50	2.05	2.96	3.54	2.88
12 ft.	9	4.64									
16 ft.	12	3.54									
20 ft.	13	2.64									
(5) Cultipacking All Sizes	19	3.18	2.75	5.25	2.00	-	2.50	5.50	3.00	2.50	3.00
(6) Fertilizer Application											
Dry Bulk	57	1.99	1.92	5.00	2.25	2.33	2.42	2.13	1.60	2.32	1.79
Liquid-Knifed in	13	3.35	-	-	-	-	-	3.00	3.00	3.30	4.75
Liquid-Ground Spray	37	2.37	1.50	10.00	2.00	-	3.25	1.94	1.95	2.17	2.36
Liquid-Aerial Spray	14	3.53	-	-	-	-	5.50	-	3.85	3.50	2.75
Gas-Knifed in	48	3.62	-	5.00	-	3.50	4.00	-	3.05	4.01	3.41
(7) Planting Corn/Beans (a) No Fertilizer All Sizes	42	4.43	7.50	7.00	5.50	5.00	3.58	4.00	4.25	4.47	3.83
4 rows All	15	4.45									
6 rows 30"	23	4.39									
8 rows All	5	4.60									

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CUSTOM RATE SURVEY

CROP REPORTING DISTRICT

	No. Reported	State Ave.	Range	Most Frequent (No.)	CROP REPORTING DISTRICT									
					1	2	3	4	5	6	7	8	9	
					Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
Sheep Shearing (\$/head)	10	1.08	.75- 1.50	1.00 (6)	1.50	1.25	-	1.13	-	1.00	-.92	1.00	1.00	1.00
Boring Post Holes (\$/hole)	10	.48	.15- 1.00	.25 (4)	.27	-	.28	.15	.33	.95	.25	-	1.00	1.00
Tilling (\$/rod)	33	3.45	1.86- 6.25	2.00 (3)	7.58	4.00	2.73	3.28	2.51	-	4.30	3.97	2.48	3.06
(a) digging-trenching	38	3.51	.55- 8.50	4.00 (3)	5.00	-	3.20	8.25	3.59	1.40	4.44	3.02	3.06	3.06
(b) plastic pipe	9	3.52	2.00- 6.00	-	-	-	-	-	-	-	5.00	5.15	2.73	2.73
(c) clay tile														
Bullfinching (\$/hour)	38	24.62	-	-	18.50	17.33	15.50	24.75	22.50	25.00	22.92	31.61	22.42	22.42
10'	42	30.00	-	-	22.00	-	-	30.00	30.00	25.00	27.56	32.09	32.80	32.80
12'	19	34.11	-	-	30.00	47.50	-	40.00	29.50	40.00	38.33	36.67	29.40	29.40
Backhoe (\$/hour)	88	21.67	7.00-40.00	25.00 (20)	18.67	21.50	21.30	-	17.67	21.33	20.14	21.03	22.59	22.59
Dragline (1/2 cu. yd) (\$/hour)	23	30.24	18.00-45.00	25.00 (7)	28.33	25.00	18.00	45.00	-	37.00	28.40	29.19	32.00	32.00
Grinding Feed (\$/CWT)	17	.31	.10- .80	.20 (4)	.35	.57	-	.23	-	-	.24	.25	.18	.18
Grinding and Mixing Feed (\$/CWT)	24	.35	.15- 1.00	-	.57	.58	.50	.25	.25	.50	.26	.23	.23	.23
Chainawork (\$/hour)	17	7.79	4.00-20.00	-	5.83	6.00	5.50	-	-	-	11.67	9.33	8.00	8.00

Part II—How to figure custom rates

If you are hiring or doing custom work, the following will help you set the custom rate. Custom rates are based on (1) tradition or usual rates set in the community, (2) bargaining position of both parties, and (3) costs of operating the machines on your farm.

Here is how the machine cost of operation can be determined:

A. Ownership cost per unit (acre, bushel, ton, hour)

Depreciation:	$\frac{\text{Original cost-salvage value}}{\text{estimated life}}$	\$ _____
Interest:	Interest rate \times original cost $+ 2$	_____
Repairs:	Estimated 2 to 5% of original cost	_____
Taxes and insurance:	Estimated 1 to 2% of original cost	=====
Total ownership cost annually	_____
Ownership cost per unit: Total ownership cost $+$ estimated annual use (acre, hour, bushel, ton)		(A) \$ _____

B. Operating cost per unit (acre, hour, bushel, ton)

Tractor: Gas, diesel fuel, oil, and minor maintenance		
Gal. gas per unit \times price $\times 1.10^*$	_____	
Machine: Gas, oil, maintenance		
Gal. gas per unit \times price $\times 1.10^*$	_____	
Labor: Hours per unit \times wage rate. If acres, bushels or tons, divide the wage rate by acres, bushels or tons per hour	=====	
Total operating cost per unit		(B) \$ _____

C. Total ownership and operating cost (A + B) per unit \$ _____

D. Custom rate (per acre, hour, bushel, or ton) \$ _____

Total ownership and operating cost may be adjusted because of bargaining power, or risk.

*The addition of 10% gasoline cost is for oil and minor maintenance.