

● Rates for Custom Work in Michigan

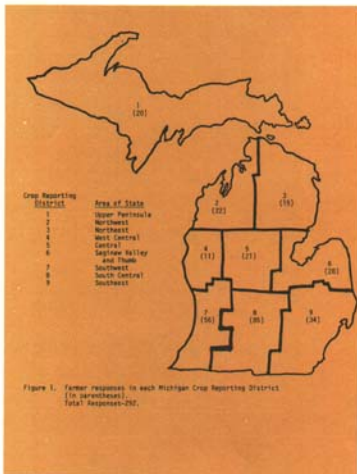
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Custom hire of machine services may be viewed as an economically desirable alternative for many farmers. For farmers having a relatively small land base and/or limited labor availability, hiring-in of machine services enables these farmers to employ 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 1979 from selected Michigan farmers. The usable responses numbered 292 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



districts. The number of Michigan farmers reporting each custom-hire service is given as is 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, interest rates and alternative uses of dollars that might be invested elsewhere.



PART I. TABLE 1. CUSTOM RATES IN MICHIGAN^a

1. <u>HIRED LABOR</u>	CUSTOM RATE SURVEY	CROP REPORTING DISTRICT																	
		1		2		3		4		5		6		7		8		9	
		Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
		No. Reported	State Average																
(1) Part-time (\$/HR)	205	\$3.20																	
(2) Full-time (\$/MO)	102	\$779.																	
(3) No. reporting full-time labor	8	9	3	5	6	11	21	25	14										
(4) Percent that furnished full-time labor with:																			
House		50%																	
Meat	49		38%	56%	33%	40%	83%	45%	43%	56%	50%								
Milk	38		25	44	33	20	83	36	48	56	64								
Medical Insurance	45		63	33	67	40	50	63	38	32	57								
Life Insurance	5		100	100	100	100	100	100	100	100	100								
Workers' Compensation	80		75	100	100	80	50	63	80	80	86								
Unemployment Insurance	14		25	44	67	40	0	9	10	4	0								
Transportation	24		0	33	0	20	67	27	29	12	29								
Retirement Plan	11		0	22	33	0	17	9	10	8	14								

II. CUSTOM FARMING RATE (Includes all machine and labor activities necessary to grow and harvest 1 acre.)

Crop	No. Reported		State Average	
	No.	Average	No.	Average
(1) Corn (\$/Acre)	46	\$63.70		
(2) Soybeans (\$/Acre)	19	61.50		
(3) Small Grains (\$/Acre)	35	40.90		
(4) Forage (\$/Acre)	16	74.50		
			\$76.85	59.25
			30.00	67.50
			60.00	99.50
			53.15	54.45
			60.00	59.85
			41.00	34.10
			82.00	50.00

III. EQUIPMENT RENTAL RATES

(1) Tractor Only (\$/HR)																			
All sizes	57	\$ 17.50																	
Less than 120 hp			\$17.10	12.70	14.00	23.35	13.00	15.15	--	--	16.80								
121-140 hp			--	--	--	--	--	--	--	17.20	16.00	19.35							
141-160 hp			--	--	--	--	--	--	--	--	--	25.00	--						
Larger than 160 hp			--	--	--	--	--	--	24.60	--	--	--	--						

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

CUSTOM RATE SURVEY

CROP REPORTING DISTRICT

	No. Reported	State Average	Average								
			1	2	3	4	5	6	7	8	9
(b) Small Grain All Sizes	142	(\$/acre) \$12.70	\$12.90	\$12.00	\$11.90	\$14.70	\$12.00	\$11.55	\$13.35	\$12.60	\$13.35
(c) Soybeans All Sizes	72	14.65	--	12.00	--	16.50	15.00	14.00	15.40	14.65	14.30
(d) Field Beans All Sizes	16	15.15	--	--	19.00	--	15.00	13.70	--	15.35	20.00
(e) Alfalfa and Clover All Sizes	7	15.00	--	--	10.00	--	--	12.50	20.00	15.00	20.00
(f) Ear Corn Picker All Sizes	51	12.20	15.00	15.50	13.00	--	11.50	10.00	11.70	11.90	9.80
(13) Field Chopping-Corn Silage Pull-Type (2 row) Self-Propelled (3 row)	24 16	24.25 32.10	25.00 25.00	22.50 25.00	19.00 --	-- --	-- --	35.00 38.35	25.00 29.00	24.15 33.75	24.15 32.50
(14) Field Chopping-Haylage Pull-Type Self-Propelled	8 5	22.00 25.00	18.00 --	25.00 --	-- --	-- --	-- --	20.00 27.50	20.00 30.00	-- 20.00	27.50 --
(15) Site-Filling (Including charges for field chopping, handling, blowing and/or packing.)		(\$/hour)									
(a) Tower	21	47.10	47.50	--	--	--	--	47.50	48.35	45.45	49.00
(b) Harvested	11	52.75	--	--	--	--	--	47.50	40.00	65.00	50.00
(16) Haymaking		(\$/acre)									
(a) Mowing	16	3.35	2.50	3.50	2.50	1.50	--	10.00	3.25	3.20	2.75
(b) Raking	29	2.50	2.50	2.85	1.75	1.00	--	3.50	1.85	2.75	2.45
(c) Pull-Type (Mower-conditioner)	41	5.80	5.00	7.50	3.70	--	5.50	9.50	4.35	5.55	5.10
(d) Self-propelled (Mower conditioner)	14	6.10	3.50	--	5.00	--	--	8.65	5.00	5.35	5.50
(17) Hay Harvest		\$/bale									
(a) Conventional Balers											
(1) Hay (twine) 40-80 lb	76	.24	.25	.21	.21	--	.25	.21	.27	.24	.26
(2) Straw (twine) 30-35 lb	60	.23	.14	.20	.24	--	.25	.24	.25	.23	.26
(3) Hauling Bales 40-55 lb	13	.09	--	.10	.13	--	--	.04	--	.10	.10

CUSTOM RATE SURVEY

CROP REPORTING DISTRICT

	No. Reported	State Average (\$/bale)	Average										
			1	2	3	4	5	6	7	8	9		
(4) New Holland Bale wagon	4	.15	--	--	.10	--	--	--	--	--	--	.30	.15
(b) Big Bale Baler													
(1) Hay (5000 lbs)	36	5.05	--	5.00	1.50	--	4.85	4.20	4.70	5.20	4.70	5.20	4.95
(2) Straw (1000-1500 lb)	13	5.30,	--	--	--	--	--	3.50	4.50	5.85	--	5.85	--
(3) Hauling big bales	4	1.25	--	--	1.00	--	--	1.00	--	1.50	--	1.50	--
(c) Mechanical Long Hay													
Stackers	1	8.00	--	--	--	--	--	--	--	8.00	--	8.00	--
(1) Hay (2500 lbs)	2	5.00	--	--	2.00	--	--	--	--	8.00	--	8.00	--
(2) Straw (2500 lbs)													
(18) Other Harvesting Work													
Stalk shredding	12	4.35	--	4.00	3.50	--	--	8.50	3.00	3.75	3.00	3.75	3.50
Harvesting Potatoes	3	30.00	--	--	--	--	--	20.00	35.00	--	--	--	--
Harvesting Sugar Beets	5	39.40	--	--	--	--	--	40.50	--	--	--	--	35.00
Bean Winnowing	9	7.00	--	--	7.50	--	5.00	7.20	--	--	--	--	--
Blueberries	3	(\$/lb)	--	.05	.08	--	.06	--	.14	--	--	--	--
Tart cherries	12	.07	--	.05	--	--	.06	--	.09	--	--	--	--
Sweet Cherries	7	.07	--	.07	--	--	--	--	--	--	--	.06	--
Grapes	3	.04	--	.07	--	--	--	--	.02	--	--	--	--
(19) Manure Handling													
Yard Scraping	15	(\$/hour)	12.50	--	10.00	--	--	7.00	15.00	16.00	10.00	16.00	10.00
Loading with tractor	30	12.85	12.50	12.50	10.00	--	--	7.00	17.75	18.25	12.60	18.25	12.60
Spreading	30	13.00	12.50	12.50	10.00	--	--	7.00	17.75	18.25	12.60	18.25	12.60
Liquid Manure	17	13.00	20.00	--	--	--	--	10.35	17.00	9.00	11.00	9.00	11.00
Pump Rental	3	4.70	5.00	--	--	--	--	5.00	--	4.00	--	4.00	--
Hauling and spreading on surface	2	17.50	20.00	--	--	--	--	--	--	15.00	--	15.00	--
Hauling and knifing- in	1	25.00	25.00	--	--	--	--	--	--	--	--	--	--
(20) Miscellaneous Custom Work													
(Including only the cost for machine and labor service hired)													
Boom Spraying (Material cost not included)													
(a) Insect and disease control	26	3.00	2.00	3.35	2.75	--	1.00	3.40	2.80	3.10	3.50	3.10	3.50
(b) Weed control	50	2.70	2.50	3.25	2.70	3.00	0.75	3.40	2.50	2.65	2.70	2.65	2.70

CUSTOM RATE SURVEY

CROP REPORTING DISTRICT

	No. Reported	State Average (\$/acre)	Average								
			1	2	3	4	5	6	7	8	9
Aerial spraying (Material cost not included)											
(a) Airplane-Insects and disease	33	3.50	\$ 5.00	\$--	\$ 3.90	\$ 3.30	\$--	\$ 4.50	\$ 3.40	\$ 3.60	\$ 3.05
(b) Helicopter-Insects and disease	10	3.90	--	4.40	4.00	3.40	--	4.00	5.00	2.50	4.00
(c) Airplane-weed and brush	6	3.50	--	4.00	4.00	--	--	3.75	3.00	3.00	3.00
(d) Helicopter-weed & brush	4	3.95	--	3.50	4.15	4.00	--	--	--	--	--
Rotary mowing (weed & brush)	10	0.30	--	8.50	5.00	--	--	13.70	5.00	5.00	5.00
Shelling ear corn from crib (\$/bu)	8	.11	.20	--	--	--	--	--	.12	.08	--
Drying Corn											
(a) up to 5 points moisture removed	14	-.09	.25	.10	--	--	--	.11	.06	.06	.07
(b) up to 10 points moisture removed	17	.14	--	.15	--	--	--	.16	.13	.15	.12
(c) up to 15 points moisture removed	15	.19	--	--	--	--	--	.23	.18	.24	.18
(d) more than 15 points moisture removed	11	²¹ (5.21)	--	--	--	--	--	--	.20	--	.26
Trucking	50	¹⁸ (72 mile)	.10 (50)	.12 (119)	.09 (80)	.10 (40)	--	.16 (34)	.21 (94)	.24 (75)	.07 (47)
Sheep shearing	12	(\$/head)	1.50	1.20	1.00	--	--	5.00	--	1.05	1.00
Boring Post Holes	13	(\$/hole)	.75	.40	.30	--	--	2.35	.75	1.20	.90
Tilling											
(a) digging-trenching	19	3.85	--	--	--	--	--	2.60	5.50	4.45	2.2
(b) plastic pipe	19	3.40	--	--	--	--	--	2.75	3.95	3.95	2.95
(c) clay tile	3	4.45	--	--	--	--	--	--	5.15	3.00	--
Building fence (materials not included)											
(a) Barb wire	6	2.35	--	--	2.50	--	--	3.00	2.00	2.00	2.50
(b) Hoven wire	7	4.30	--	--	3.00	--	--	4.00	5.00	4.35	5.00

CUSTOM RATE SURVEY

CROP REPORTING DISTRICT

	No. Reported	State Average	Average								
			1	2	3	4	5	6	7	8	9
Bulldozing 9' size average	02	34.00	\$29.70	\$34.50	\$22.50	\$37.40	\$--	\$32.65	\$31.05	\$37.05	\$31.90
Backhoe	63	25.55	23.40	33.35	18.35	25.00	25.00	25.80	24.80	25.60	27.75
Dragline (1/2 cu. yd)	10	39.30	35.00	--	--	--	--	39.50	50.00	35.00	40.00
Stone picking	14	14.90	10.00	--	12.50	--	--	27.50	5.45	15.00	--
Chainsaw work	16	11.60	6.50	7.00	5.00	--	10.00	9.50	9.50	5.00	22.00
Snow plowing	50	25.15	22.50	25.35	15.00	40.00	20.00	16.60	30.55	23.70	28.75
Milking	29	6.00	5.75	5.00	5.00	--	--	5.50	5.75	5.85	9.25
Grinding and Mixing Feed	43	\$.27	.23	.20	.28	.25	.10	.33	.23	.21	.31
Accounting (bookkeeping)	34	493.	130.	800.	350.	--	--	1120.	364	290.	279.

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 $+ \text{estimated annual use (acre, hour, bushel, ton)}$	(A) \$ _____

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

Tractor: Gas, diesel fuel, oil, and minor maintenance	
Gal. gas per unit \times price $\times 1.15^*$	_____
Machine: Gas, oil, maintenance	
Gal. gas per unit \times price $\times 15^*$	_____
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 15% gasoline cost is for oil and minor maintenance.

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