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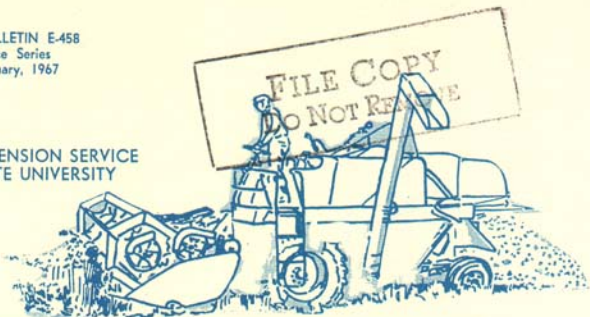
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Rates for Custom Work in Michigan
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W.A. Tinsley, Agriculture Economics
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COOPERATIVE EXTENSION SERVICE
MICHIGAN STATE UNIVERSITY



RATES FOR CUSTOM WORK IN MICHIGAN

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FARMERS WHO HIRE or do custom work face the problem of determining a charge for the services. To help them, this pamphlet presents a summary of custom rates in common use in Michigan.

These rates are not set forth as those which should be charged. These are rates reported by a panel of Michigan farmers who hire or do custom work.

Rates may vary in the same area because of differences in the size and type of equipment, distance to the job, quantity of materials furnished and services performed. However, the reported rates do help in establishing charges.

Often farmers have to determine custom rates for new or unusual custom jobs when there are no prevailing

market rates for these operations. A second section of this folder contains some guidelines for figuring such rates.

A big question most farmers face is whether machinery should be owned or custom hired. A third section of this folder suggests means of analyzing which is the more profitable alternative.

PART 1—CURRENT CUSTOM RATES

Prevailing Rates

Tables 1 and 2 contain both the range of rates for a number of Michigan custom operations and the most common rate or rates reported.

TABLE 1.—Rates for Custom Work in Michigan
(Charges include machine, tractor, and operator or usual crew.)

Custom Job and Equipment	Acre Rates		Hourly Rates	
	Usual range	Most common rate or rates	Usual range	Most common rate or rates
CHOPPING HAY AND SILAGE				
Pull type chopper and blower with:				
1 man, 1 tractor, 2 wagons	\$ 4.00-16.00	\$12.00	\$ 9.00-13.50	\$10.00
2 men, 2 tractors, 2-3 wagons	4.00-16.00	14.00-16.00	12.00-17.00	14.00
Self propelled chopper				Varies with size crew
2 men, 2 tractors, 3 wagons			17.50-30.00	
SILLO FILLING				
	Rate Per Foot Filled			
10 foot silo	1.00- 6.00	2.00-2.50-3.00		
12 foot silo	3.00- 5.00	3.00		
14 foot silo	3.50- 5.00	4.00- 5.00		
20 foot silo	10.00-12.00	10.00		
COMBINING				
Small grain				
5- 7 foot	5.00- 7.50	6.00	5.00- 7.50	6.00- 7.00
8-12 foot	5.00- 8.00	6.00	12.00-16.00	12.00
10-14 foot	5.00- 8.50	6.00	12.00-20.00	12.00
Field beans	6.00- 8.50	7.00	6.00-14.00	9.00
Bean Pulling	1.50- 4.00	2.00		5.00
Soybeans	5.00- 8.00	6.00	6.00-	11.00
Alfalfa and clover seed	5.00-15.00	6.00	6.50- 7.50	7.50
PICKING CORN				
Conventional picker				
(no shelling)	5.00-10.00	6.00		
Picking and shelling corn				
per bushel .....	.10- .17	.10		
Picking and shelling corn				
per acre	5.00-12.00	8.00		
Picking and shelling with a				
flat charge per acre	5.00-10.00	5.00		
plus so much per bushel .....	.02- .06	.05		
OTHER HARVESTING WORK				
Roto beating potatoes	3.00- 4.00	4.00		
Digging potatoes	6.00-	6.00		
Swathing grain	1.50- 3.50	2.50		
Stalk shredding	1.00- 4.00	2.00	4.00- 7.00	5.00
Harvesting sugar beets	20.00-25.00	20.00		
HAYING				
Mowing	1.00- 4.00	1.50	3.00- 7.00	5.00
Conditioning, or crimping .....	.50- 3.50	1.50	3.00- 5.00	5.00
Raking, side delivery .....	.50- 3.50	1.50	3.00- 5.00	5.00
Self propelled swather	4.00	4.00		
(12' with conditioner)				
Mowing and conditioning	2.00- 4.50	2.50		

TABLE 1. — Continued
(Charges include machine, tractor, and operator or usual crew.)

Custom Job and Equipment	Acre Rates		Hourly Rates	
	Usual range	Most common rate or rates	Usual range	Most common rate or rates
FIELD BALING	Rate per bale dropped on ground			
Automatic baler				
Hay (twine)	\$.08- .14	\$.10	\$ 5.00- 7.00	
(wire) .....	.10- .20	.15	5.00- 7.00	
Straw (twine) .....	.08- .14	.10	6.00- 7.00	
(wire) .....	.10- .20	.14	4.50- 7.00	
Hauling bales to barn .....	.05- .10	.10	1.00- 1.50	
Charge for bale thrower & wagon .....	.01- .04	.02		
Charge per bale for pulling a wagon .....	.01- .03	.01		
PLOWING				
3-bottom	3.00- 7.00	5.00	3.50- 7.50	\$ 5.00- 7.00
4-bottom	3.00- 7.00	5.00	5.00- 9.00	8.00
5-bottom	3.00- 7.50	5.00	6.00-10.50	8.00
DISKING				
8-foot	1.00- 3.50	2.00	3.50- 7.00	5.00
10-foot	1.00- 3.00	2.00	4.00- 8.50	5.00- 6.50
DRAGGING				
2-section	1.00- 2.50	1.50	3.00- 5.00	3.00
3-section	1.00- 2.50	1.50	3.50- 5.50	4.00
4-section .....	.50- 3.00	1.00	3.50- 6.50	5.00
PACKING				
Cultipacker .....	.50- 2.50	1.00	3.00- 8.00	3.00-4.00-5.00
MANURE HANDLING				
Loading with tractor			2.00- 7.50	5.00
Spreading			2.50- 7.00	4.00
DRILLING (Small grain and beans)				
With fertilizer	1.50- 3.50	2.00	2.50- 6.00	6.00
Without fertilizer .....	.50- 3.00	2.00	3.00- 6.00	3.00-4.50-5.00
Band seeding	1.00- 3.00	2.00- 2.50	3.00- 6.00	4.50
PLANTING SUGAR BEETS	2.00- 5.00	3.00		
PLANTING CORN				
2-row planter without fertilizer	1.50- 3.50	2.00	3.50- 5.00	3.50- 5.00
4-row planter without fertilizer	1.00- 4.00	2.00	5.00- 6.50	5.00
4-row planter applying fertilizer & chemicals	1.50- 4.00	2.50	5.00- 6.50	5.50
6-row planter without fertilizer	1.50- 3.50	2.50	5.00- 7.50	
6-row planter applying fertilizer & chemicals	2.00- 4.00	3.00	5.50- 7.50	6.50
PLANTING POTATOES (2 row planter)	5.00- 7.50	6.00		
CULTIVATING				
2-row cultivator	1.00- 3.00	2.00	3.00- 5.00	3.00
4-row cultivator	1.00- 3.50	2.00	4.00- 5.00	5.00
4-row rotary hoe .....	.50- 3.00	1.00	3.00- 5.00	5.00

TABLE 2—Rates for Miscellaneous Custom Work

(Includes machine and operator or usual crew.)

CUSTOM JOB	Basis of charge	Usual range	Most Common rate or rates
Spraying			
(no materials)			
Row crops	hour	\$ 2.00- 6.00	\$ 6.00
	acre	1.00- 5.00	1.50
Orchard	hour	4.00- 6.50	
Weeds	acre	1.00- 3.50	1.50
Bulldozing	hour		
7' blade		10.00-18.00	10.00
10' blade		10.00-20.00	15.00
12' blade		12.00-30.00	20.00
Tiling	rod	1.00- 2.25	1.25
Buzzing wood ...	hour	3.00- 8.00	5.00
Chain-saw work .	hour	2.50- 6.00	3.50
Trucking	hour	2.00- 6.50	5.00
	mile	.15- .25	.25
Grinding feed ...	cwt.	.10- .20	.15
Tree planting ...	thousand	9.00-16.00	10.00
Boring post holes.	hole	.10- .20	.15
	hour	4.00- 7.00	5.00
	hour	4.00-11.00	5.00
Plowing snow ...			
Brush chopping —			
orchards	hour	5.00-10.00	7.00
Bulk spreading —			
fertilizer	acre	.50- 5.00	1.00
	ton	1.00- 4.00	2.00
Applying			
anhydrous			
ammonia	acre	.50- 5.00	1.50
Dusting potatoes.	acre	.50- 2.00	2.00
Shelling corn	bushel	.05- .10	.05
	hour	6.00- 7.00	
Drying corn*	bushel	.04- .14	.10
Sheep shearing ...	head	.40- .80	.50
Aerial seeding ...	acre	.75- 2.50	1.50
Aerial spraying			
(no materials)			
Insects	acre	1.00- 2.50	1.75
Weeds	acre	.50- 2.00	2.00
Brush	acre	.50- 2.50	2.00
Backhoe	hour	7.00-13.00	10.00
Dragline—			
½ cu. yd.	hour		12.00

*Most base rates on percentage of moisture. One basis for a charge was 1c for each 1% of moisture above 15%.

Part II — How to figure custom rates ^x ^x

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 \div 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 \div estimated annual use	(bu., acre, ton, hour)	(A) \$ _____

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

<i>Tractor: Gas, oil, repair</i>			
	Gal. gas per unit \times price \times 1.10†	.....	_____
<i>Machine: Gas, oil, maintenance</i>			
	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 plus B) per unit \$ _____

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

Total ownership and Operating cost adjusted for tradition, bargaining power, or risk.

*Interest on declining balance basis.

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

**Source: T. B. Nodland and H. G. Routh, Extension Pamphlet 134, University of Minnesota, June 1961.

Part III — Farm machinery — should you own it? * *

To decide if you should own a machine, compare the custom rate with the ownership and operating cost of the machine on your farm. Use the following worksheet to determine cost of ownership and operating the machine. Compare this cost with the custom rate in your area.

1. Determination 1—What will be the annual cost of owning and operating this machine?

Ownership Cost

Depreciation: $\frac{\text{Original cost—salvage value}}{\text{estimated life}}$ \$ _____

Interest: Interest rate \times original cost \div 2* _____

Repairs: Estimated 2 to 5% of cost _____

Taxes and Insurance: Estimated 1 to 2% of cost _____

Total ownership cost annually: (A) \$ _____

Ownership cost per unit: Total ownership cost \div estimated annual use
(bu., acre, ton, hour) (B) \$ _____

Operating Cost per Unit

Tractor: Gas, oil, repair

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, tons per hour _____

Total operating cost per unit (C) \$ _____

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

2. Determination 2—Will it cost more to own it than to hire it done?

Custom rate (see tables 1 and 2) (E) \$ _____

If ownership and operating cost exceed the custom rate, purchase is not desirable unless loss of production and timeliness of operation are an important factor. One should also consider alternative uses for capital and labor in another part of the farm business.

3. Determination 3—What acreage (or number of other units) is necessary to justify purchase of this machine?

$\frac{\text{Total ownership cost (A _____)}}{\text{Custom rate—operating cost (E - C = _____)}} = \text{_____ acreage (or number of other units)}$
needed to justify ownership.

Note: Other factors that might help justify a purchase are:

- 1) Possible losses due to untimeliness,
- 2) Possibility of doing custom work.

Other factors that might be unfavorable toward purchase are:

- 1) Better alternative use of capital.
- 2) Alternative value of tractor and labor saved if custom work is hired.
- 3) Possible to do job with smaller machine.

*Interest on declining balance basis.

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

**Source: T. R. Nodland and H. G. Roushe, Extension Pamphlet 154, University of Minnesota, June 1961.