



## RATES FOR CUSTOM WORK IN MICHIGAN

COOPERATIVE EXTENSION SERVICE • MICHIGAN STATE UNIVERSITY

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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 suggested 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 size and type of equipment, distance to the job, quantity of materials furnished and services performed. However, these reported rates can help in establishing charges.

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.

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

TABLE 1—CUSTOM RATE SURVEY

(Charges include machine, tractor, and operator or usual crew)

Custom Job and Equipment	Range of Charges	Charges Most Frequent	Range of Charges	Most Frequent Charges
<b>CHOPPING HAY AND SILAGE</b>				
Pull type chopper and blower with:				
	PER ACRE		PER HOUR	
1 man, 1 tractor, 2 wagons	\$ 6.50-15.00	\$15.00	\$ 7.00-25.00	\$15.00 & 12.00
2 men, 2 tractors, 2-3 wagons	\$ 9.00-22.00	\$15.00	\$10.00-35.00	\$25.00 & 15.00
Self propelled chopper				
2 men, 2 tractors, 3 wagons	\$18.00	\$18.00	\$12.50-30.00	\$25.00 & 20.00
<b>SILO FILLING</b>				
	PER FOOT FILLED		PER TON	
10 foot silo	\$ 2.00- 4.00	\$2.50	\$ 1.00- 2.00	\$2.50
12 foot silo	\$ 3.00- 5.00	\$3.00 & 3.50	\$ 1.00- 2.00	\$2.50
14 foot silo	\$ 2.00- 8.50	\$4.50 & 5.50	\$ 1.00- 2.00	\$2.50
20 foot silo	\$ 3.25-15.00	\$10.00	\$ 1.00- 2.00	\$2.50
24 foot silo	\$12.00-15.00	\$12.00 & 15.00	\$ 1.00- 2.00	\$2.50
30 foot silo	\$12.50-20.00	\$12.50	\$ 1.00- 2.00	\$2.50
<b>COMBINING</b>				
	PER ACRE		PER HOUR	
Small grain				
5-7 foot	\$ 4.00- 8.00	\$6.00 & 7.00	\$ 5.00-12.00	—
8-12 foot	\$ 5.50- 9.00	\$6.00 & 7.00	\$ 7.00-15.00	—
10-14 foot	\$ 5.00- 8.00	\$6.00 & 7.00	\$15.00-30.00	—
Field beans				
	\$ 6.00-10.00	\$7.00 & 8.00	\$15.00	—
Bean pulling				
	\$ 1.00- 4.00	\$3.00 & 2.00	—	—
Bean windrowing				
	\$ 1.00- 6.00	\$2.00 & 2.50	—	—
Soybeans				
	\$ 6.00- 8.00	\$6.00 & 7.00	—	—
Alfalfa and clover seed				
	\$ 6.00-10.00	\$7.00 & 8.00	—	—
<b>HAYING</b>				
	PER ACRE		PER HOUR	
Mowing	\$ 1.00- 3.00	\$1.50 & 2.00	\$ 4.00- 6.00	\$6.00
Mowing and conditioning	\$ 1.00- 4.00	\$3.00	\$ 7.00-15.00	—
Raking	\$ 1.00- 3.75	\$1.50	—	—
Pull-type mower-conditioner	\$ 2.00- 7.00	\$3.00	\$ 8.00-18.00	—
Self-propelled swather	\$ 1.00- 5.00	\$4.00	\$ 3.50-10.00	\$6.00
<b>OTHER HARVESTING WORK</b>				
	PER ACRE		PER HOUR	
Stalk shredding	\$ 1.00- 4.50	\$2.00	\$ 5.00- 8.00	—
Swathing grain	\$ 2.00- 4.00	\$2.50	\$10.00	—
Digging potatoes	\$40 (In boxes)	—	—	—
Roto beating potatoes	\$ 2.50- 5.00	—	\$6.00	—
Harvesting sugar beets	\$18.00-25.00	\$22.00	\$1.70 per ton	—
<b>PICKING CORN</b>				
	PER ACRE		PER BU.	
Conventional picker—no shelling	\$ 5.00- 8.00	\$6.00 & 7.00	\$ .09	\$ .09
Field shelling				
a) Picker-sheller	\$ 5.00-12.00	\$8.00	—	\$5.00/A + .05/bu.
b) Combine shelling	\$ 7.00-12.00	\$8.00 & 10.00	—	\$5.00/A + .05/bu.
Field grinding				
a) Picker-grinder	\$15.00	\$15.00	—	—
b) Combine grinding	\$15.00	\$15.00	—	—

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

Custom Job and Equipment	Range of Charges	Most Frequent Charges	Range of Charges	Most Frequent Charges
<b>FIELD BALING</b>				
	PER BALE			
Hay (twine) .....	\$ .08- .15	\$ .10 & .12	—	—
(wire) .....	\$ .10- .15	\$ .10 & .12	—	—
Straw (twine) .....	\$ .10- .15	\$ .10 & .12	—	—
(wire) .....	\$ .10- .15	\$ .10 & .11	—	—
Hauling bales to barn .....	\$ .01- .10	\$ .05	—	—
Charge per bale for pulling a wagon .....	\$ .01- .10	\$ .02	—	—
<b>PLOWING</b>				
	PER ACRE		PER HOUR	
3-bottom .....	\$ 3.50- 7.00	\$5.00	\$ 4.00- 6.00	\$5.00
4-bottom .....	\$ 3.50- 7.00	\$5.00	\$ 4.00-10.00	\$6.00 & 8.00
5-bottom .....	\$ 3.50- 8.00	\$5.00 & 6.00	\$ 6.00-15.00	—
6-bottom .....	\$ 3.50- 8.00	\$5.00 & 6.00	\$ 6.00-15.00	—
7-bottom .....	\$ 3.50- 7.00	\$5.00 & 6.00	—	—
8-bottom .....	\$ 5.00- 7.00	\$5.00 & 6.00	—	—
<b>DISKING</b>				
	PER ACRE		PER HOUR	
8-foot .....	\$ 1.50- 4.00	\$1.50 & 2.00	\$ 4.50- 7.50	—
10-foot .....	\$ 1.50- 4.00	\$1.50 & 2.00	\$ 6.00-12.00	—
<b>DRACGING</b>				
	PER ACRE		PER HOUR	
2-section .....	\$ 1.25- 3.00	\$1.50	—	—
3-section .....	\$ 1.00- 3.00	\$1.50 & 2.00	\$ 4.50- 5.00	—
4-section .....	\$ 1.00- 3.00	\$1.50 & 2.00	\$ 6.00-12.00	—
<b>PACKING</b>				
	PER ACRE		PER HOUR	
Cultipacker .....	\$ .50- 3.00	\$1.00 & 1.50	\$ 4.50- 7.00	—
<b>MANURE HANDLING</b>				
			PER HOUR	
Loading with tractor .....	—	—	\$ 5.00-10.00	\$5.00 & 8.00
Spreading .....	—	—	\$ 3.00- 7.00	\$4.00
<b>DRILLING (small grain and beans)</b>				
	PER ACRE		PER HOUR	
With fertilizer .....	\$ 1.50- 6.00	\$2.00 & 2.50	\$ 8.00-12.00	—
Without fertilizer .....	\$ .50- 3.00	\$1.50 & 3.00	—	—
Band seeding .....	\$ .75- 4.00	\$2.00	\$4.00	—
<b>PLANTING SUGAR BEETS</b>				
	PER ACRE			
	\$ 2.00-10.00	\$5.00 & 6.00		
<b>PLANTING CORN</b>				
	PER ACRE		PER HOUR	
2-row planter without fertilizer .....	\$ 1.00- 3.00	\$1.00 & 3.00	\$4.00	—
4-row planter without fertilizer .....	\$ 1.50- 4.00	\$2.00 & 2.50	\$ 6.00-12.00	—
4-row planter applying fertilizer and chemicals .....	\$ 1.50- 5.00	\$2.00 & 2.50	—	—
6-row planter without fertilizer .....	\$ 1.00- 2.50	\$2.00	—	—
6-row planter applying fertilizer and chemicals .....	\$ 1.50- 5.00	\$2.50 & 3.00	—	—
<b>PLANTING POTATOES</b>				
	PER ACRE			
2-row planter .....	\$ 5.00- 7.50	\$ 5.00	—	—
4-row planter .....	\$10.00-12.00	\$10.00	—	—
<b>CULTIVATING</b>				
	PER ACRE		PER HOUR	
2-row cultivator .....	\$ 1.50- 5.00	\$1.50 & 2.00	\$5.00	—
4-row cultivator .....	\$ 1.25- 4.00	\$2.00	\$ 6.00-12.00	—
4-row rotary hoe .....	\$ 1.00- 3.00	\$1.50 & 2.00	\$9.00	—

TABLE 2—RATES FOR MISCELLANEOUS CUSTOM WORK

(Includes machine and operator or usual crew)

Job	Basis for Charge	Range of Charges	Most Frequent Charges
Spraying—no materials			
Boom spraying			
(a) Insect and disease control	Acre	\$ 1.00- 2.00	\$ 1.50
(b) Weed control	Acre	\$ 1.00- 2.25	\$ 1.50
Air carrier spraying			
(a) Row crops	Acre	\$ 1.50- 3.00	\$ 2.00
(b) Orchard	Acre	\$ 2.00- 4.00	\$ 2.00
Aerial spraying			
(a) Airplane—Insects and disease	Acre	\$ 1.00- 4.00	\$2.00 and \$3.45
(b) Airplane—Weeds and brush	Acre	\$ 2.00- 3.00	\$2.00 and \$2.50
(c) Helicopter—Insects and disease	Acre	\$ 2.00- 4.00	\$2.25 and \$2.50
(d) Helicopter—Weeds and brush	Acre	\$ 2.00- 2.50	\$2.25 and \$2.50
Bulldozing			
(a) 8' blade	Hour	\$ 7.00-22.00	\$12.00
(b) 10' blade	Hour	\$10.00-25.00	\$18.00
(c) 12' blade	Hour	\$15.00-30.00	\$20.00
Tiling	Rod	\$ 1.00- 3.00	\$ 1.40
Backhoe	Hour	\$ 6.00-25.00	\$12.00
Dragline (½ cu. yard)	Hour	\$ 9.00-25.00	\$20.00 and \$18.00
Stone picking	Hour	\$ 8.00-16.00	
Rotary mowing (weeds and brush)	Acre	\$ 1.00- 8.00	\$ 1.50
Brush chopping in orchards	Hour	\$ 5.00- 7.00	\$ 7.00
Cherry harvesting	Pound	\$ .03- .06	\$ .04
Blueberry harvesting	Pound	\$ .07- .25	\$ .10
Buzzing wood	Hour	\$ 3.00- 7.00	\$ 4.00
Chainsaw work	Hour	\$ 3.00-10.00	\$ 5.00
Trucking—hour	Hour	\$ 3.00-15.00	\$10.00
mile	Mile	\$ .20- .60	\$ .40
Grinding feed	Cwt.	\$ .10- .50	\$ .15
Bulk spreading fertilizer	Acre	\$ .50- 5.00	\$1.00, \$1.25 and \$1.50
Bulk spreading fertilizer	Ton	\$ .50- 6.00	\$ 2.00
Applying anhydrous ammonia	Acre	\$ .50- 2.50	\$ 2.00
Dusting potatoes	Acre	\$1.00	\$ 1.00
Shelling corn	Bushel	\$ .03- .10	\$ .05
Drying corn	Bushel	\$ .05-.10, also 1¢/point	\$ .10
Aerial seeding	Acre	\$ 1.00- 3.00	\$ 1.50
Sheep shearing	Head	\$ .45- .75	\$ .60
Boring post holes	Hole	\$ .10- 1.00	\$ .10, \$ .15 & \$ .50
Tree planting	1000	\$10.00-30.00	\$20.00
Plowing snow	Hour	\$ 4.00-15.00	\$6.00 & \$10.00

## 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  $\div$  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)

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, 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? \* x

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<sup>9</sup> ..... \_\_\_\_\_

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<sup>†</sup> ..... \_\_\_\_\_

##### Machine: Gas, oil, maintenance

Gal. gas per unit  $\times$  price  $\times$  1.10<sup>†</sup> ..... \_\_\_\_\_

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?

Total ownership cost (A \_\_\_\_\_)

Custom rate—operating cost (E - C = \_\_\_\_\_) = \_\_\_\_\_ 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. Routh, Extension Pamphlet 134, University of Minnesota, June 1961.