



No. 5

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 suggested as those which should be charged. These are rates reported by a panel of Michigan farmers who hire or do custom work.

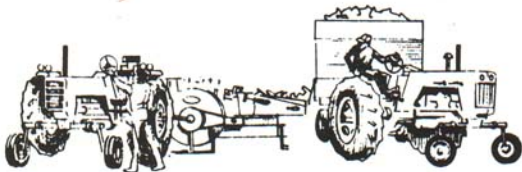
Rates may vary in the same area because of differences in size and type of equipment, distance to the job, quantity of materials furnished and services performed. However, these reported rates can help in establishing charges.

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 most profitable. Many county offices now offer computerized comparisons of whether it would be more profitable for you to buy or custom hire. Check with your local county extension office for details.



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Table 1.

CUSTOM RATE SURVEY
(Charges Include Machine, Tractor, and Operator or Usual Crew)

Custom Job and Equipment	Range of Charges		Most Common Charges	Range of Charges		Most Common Charges
	Per Acre			Per Hour		
CHOPPING HAYLAGE						
2-Row Self-Propelled Chopper With: 1 Man, 3 Wagons	\$10.00 - \$15.00		\$15.00	\$15.00 - \$30.00	\$20.00, \$25.00 & \$30.00	
2 Men, 1 Tractor, 2-3 Wagons	n.a.		n.a.	\$20.00 - \$40.00	\$32.00	
3-Row Self-Propelled Chopper & Blower With: 2 Men, 1 Tractor, 3 Wagons	n.a.		n.a.	\$15.00 - \$55.00	\$25.00 & \$35.00	
CHOPPING CORN SILAGE						
2-Row Self-Propelled Chopper & Blower With: 1 Man, 3 Wagons	\$15.00 - \$18.00		\$15.00 & \$18.00	\$15.00 - \$40.00	\$25.00 & \$30.00	
2 Men, 1 Tractor, 2-3 Wagons	n.a.		n.a.	\$20.00 - \$25.00	\$20.00	
3-Row Self-Propelled Chopper & Blower With: 2 Men, 1 Tractor, 3 Wagons	\$20.00 - \$30.00		\$25.00	\$15.00 - \$55.00	\$20.00, \$25.00 & \$30.00	
COMBINING						
Small Grain						
5-9 Foot	\$ 5.00 - \$11.00		\$ 7.00	\$ 7.50 - \$12.00	\$ 9.00	
10-12 Foot	\$ 4.00 - \$15.00		\$ 7.00, \$8.00 & \$10.00	\$ 8.50 - \$35.00	\$10.00, \$15.00 & \$20.00	
15-20 Foot	\$ 5.00 - \$10.00		\$ 6.00, \$8.00 & \$10.00	n.a.	n.a.	
Field Beans						
Soy Beans	\$ 5.00 - \$17.00		\$ 8.00 & \$10.00	\$10.00 - \$30.00	\$25.00	
	\$ 5.00 - \$20.00		\$ 8.00, \$9.00 & \$10.00	\$10.00 - \$30.00	\$25.00	
Alfalfa and Clover	\$ 7.00 - \$22.00		\$ 9.00, \$7.00 & \$12.00	\$10.00 - \$25.00	\$18.00	
HAYING						
Mowing						
Raking	\$ 1.00 - \$ 4.00		\$ 2.00 & \$ 3.00	\$ 6.00 - \$12.00	\$ 6.00	
Full-Type Mower Conditioner	\$ 1.00 - \$ 3.00		\$ 1.00 & \$ 2.00	\$ 6.00 - \$12.00	\$ 6.00	
Self-Propelled Mower Conditioner	\$ 2.50 - \$10.00		\$ 3.00, \$4.00 & \$5.00	\$ 9.00 - \$20.00	\$10.00	
	\$ 2.50 - \$ 6.50		\$ 3.50 & \$ 5.00	\$ 7.50 - \$15.00	\$12.00	
FIELD BALING						
Hay (Twine)						
(Wire)	\$.08 - \$.20		\$.12 & \$.15			
Straw (Twine)	\$.10 - \$.25		\$.17			
(Wire)	\$.08 - \$.20		\$.10, \$.12 & \$.15			
Hauling to barn	\$.12 - \$.25		\$.19			
Big Bale Baling	\$.01 - \$.11		\$.05			
Charge Per Bale for Pulling Wagon	n.a.		n.a.			
New Holland Bale Wagon	\$.01 - \$.17		\$.02			
Mechanical Long Hay Stacking	\$.05 - \$.15		\$.10	n.a.	n.a.	
SILO FILLING						
Tower						
14 Foot	\$ 3.50 - \$12.00		\$ 5.00			
16 Foot	\$ 5.00 - \$15.00		\$ 6.00			
18 Foot	\$ 8.00 - \$20.00		\$10.00			
20 Foot	\$ 7.00 - \$24.00		\$10.00 & \$12.00			
24 Foot	\$12.50 - \$20.00		\$15.50			
30 Foot	n.a.		n.a.			
OTHER HARVESTING WORK						
Stalk Shredding						
Swathing Grain	\$ 1.75 - \$ 6.00		\$3.00	\$ 7.00 - \$10.00	\$ 7.00	
Digging Potatoes	\$ 2.25 - \$ 7.00		\$ 3.00 & \$ 4.00	n.a.	n.a.	
Harvesting Sugar Beets	n.a.		n.a.	n.a.	n.a.	
Bean Windowing	\$20.00 - \$30.00		\$25.00	n.a.	n.a.	
	\$ 1.25 - \$ 7.00		\$ 3.00, \$4.00 & \$5.00	n.a.	n.a.	
MANURE HANDLING						
Yard Scraping						
Loading With Tractor	-	-	-	\$ 3.00 - \$11.00	\$ 5.00	
Spreading and Hauling	-	-	-	\$ 5.00 - \$15.00	\$ 8.00 & \$10.00	
	-	-	-	\$ 5.00 - \$20.00	\$ 5.00, \$8.00 & \$10.00	

Table 1. Continued

CUSTOM RATE SURVEY

(Charges Include Machine, Tractor, and Operator or Usual Crew)

Custom Job and Equipment	Range of Charges		Most Common Charges		Range of Charges		Most Common Charges	
	Per Acre		Per Acre		Per Hour		Per Hour	
PLOWING								
3-Bottom	\$ 5.00 - \$10.00		\$ 6.00		\$ 7.50 - \$12.00		\$10.00	
4-Bottom	\$ 4.00 - \$10.00		\$ 6.00		\$ 8.00 - \$15.00		\$11.00	
5-Bottom	\$ 5.00 - \$10.00		\$ 6.00		\$ 8.00 - \$20.00	\$10.00, \$12.00 &		
6-Bottom	\$ 5.00 - \$ 8.00		\$ 6.00		\$ 6.50 - \$22.00		\$16.50	
7-Bottom	\$ 5.00 - \$ 8.00		\$ 6.00 & \$ 7.00		n.a.		n.a.	
8-Bottom	\$ 5.00 - \$ 7.00		\$ 6.00		n.a.		n.a.	
DISKING								
			Per Acre		Per Hour			
8-Foot Tandem	\$ 2.50 - \$ 3.00		\$ 2.75		\$ 9.00 - \$ 8.00		\$ 8.50	
10-Foot Tandem	\$ 2.25 - \$ 8.50		\$ 3.00		\$10.00 - \$12.00		\$10.00	
12-Foot Tandem	\$ 1.50 - \$ 5.00		\$ 3.00		\$ 5.00 - \$15.00		\$12.00	
14-Foot Tandem	\$ 1.50 - \$ 5.00		\$ 2.00 & \$ 3.00		\$ 8.00 - \$15.00		\$15.00	
DRAWING								
			Per Acre		Per Hour			
2-Section	\$ 1.75 - \$ 2.50		\$ 2.50		\$ 6.00 - \$ 9.00		\$ 7.50	
3-Section	\$ 1.00 - \$ 7.50		\$ 2.00 & \$ 3.00		\$ 6.00 - \$15.00		\$10.00	
4-Section	\$ 1.50 - \$ 7.50		\$ 2.00		\$10.00 - \$15.00		\$10.00 & \$12.00	
CULTIPACKING								
			Per Acre		Per Hour			
	\$ 1.00 - \$ 4.50		\$ 1.50		n.a.		n.a.	
DRILLING								
			Per Acre		Per Hour			
With Fertilizer	\$ 1.75 - \$ 7.00		\$ 2.50 & \$ 3.00		\$ 2.50 - \$21.00		\$10.00	
Without Fertilizer	\$ 1.25 - \$ 6.00		\$ 2.00 & \$ 2.50		n.a.		n.a.	
Band Seeding	\$ 1.00 - \$ 7.00		\$ 3.00 & \$ 4.00		n.a.		n.a.	
PLANTING SUGAR BEETS								
			Per Acre		Per Hour			
	\$ 4.00 - \$ 7.00		\$ 4.00 - \$ 6.00		\$10.00 - \$12.00		\$10.00 & \$12.00	
PLANTING POTATOES								
			Per Acre		Per Hour			
	\$ 7.00 - \$10.00		\$ 7.00 & \$10.00		\$10.00 - \$20.00		\$10.00	
CULTIVATING								
			Per Acre		Per Hour			
4-Row Cultivator	\$ 1.25 - \$ 3.50		\$ 2.00 & \$ 2.50		\$ 2.00 - \$10.00		\$ 8.00	
4-Row Rotary Hoe	\$ 1.00 - \$ 3.50		\$1.00		\$10.00		\$10.00	
PLANTING CORN								
			Per Acre		Per Hour			
4-Row, No Fertilizer								
40" Rows	\$ 2.00 - \$ 5.00		\$ 2.00 & \$ 2.50					
4-Row, Fertilizer and Chemicals								
20" Rows	\$ 3.00 - \$ 7.00		\$ 3.00 & \$ 7.00					
30" Rows	\$ 2.00 - \$ 6.50		\$ 2.00 & \$ 4.00					
36" Rows	\$ 2.00 - \$15.00		\$ 3.00 & \$ 4.00					
40" Rows	\$ 2.00 - \$ 6.00		\$ 3.00					
6-Row, No Fertilizer								
30" Rows	\$ 2.50 - \$ 6.00		\$ 2.50 - \$ 4.00					
6-Row, Fertilizer and Chemicals								
30" Rows	\$ 1.75 - \$ 6.00		\$ 3.50					
8-Row, No Fertilizer								
30" Rows	\$ 1.50 - \$ 4.00		\$ 3.00					
8-Row, Fertilizer and Chemicals								
30" Rows	\$ 3.00 - \$ 7.00		\$ 4.75					
HARVESTING CORN								
		Range of Charges	Most Common Charges	Range of Charges	Most Common Charges	Range of Charges	Most Common Charges	
		Per Acre		Per Bushel		Per Hour		
HARVESTING CORN								
Conventional Picker -								
No shelling	\$ 5.00 - \$12.00	\$ 7.00, \$8.00 & \$10.00		n.a.	n.a.	n.a.	n.a.	
Field Shelling								
Picker - Sheller	\$ 6.00 - \$13.00	\$10.00	\$.04 - \$.09	\$.06	n.a.	n.a.	n.a.	
Combine Shelling	\$ 5.00 - \$20.00	\$10.00, \$11.00 & \$12.00	\$.04 - \$.20	\$.08	\$10.00 - \$35.00		\$25.00	
Field Grinding								
Picker-Grinder	\$11.00 - \$25.00	\$12.00	n.a.	n.a.	n.a.	n.a.	n.a.	

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 - material cost not included			
Boom Spraying			
Insect & Disease Control	Acre	\$ 1.00 - \$ 4.00	\$ 1.50 & \$ 2.00
Weed Control	Acre	\$ 1.00 - \$ 9.50	\$ 1.50 & \$ 2.00
Air Carrier Spraying			
Row Crops	Acre	\$ 1.50 - \$12.00	\$ 1.50, \$2.00, & \$4.00
Orchard	Acre	\$ 2.00 - \$12.00	\$2.00
Aerial Spraying			
Airplane - Insect & Disease	Acre	\$ 1.50 - \$ 4.95	\$ 2.00 & \$ 2.50
Airplane - Weed & Brush	Acre	\$ 1.50 - \$ 3.50	\$2.50
Helicopter-Insect & Disease	Acre	\$ 2.25 - \$ 4.00	\$2.50
Helicopter - Weed & Brush	Acre	\$ 2.25 - \$ 3.50	\$ 2.50 & \$ 3.00
Bulldozing			
8' Blade	Hour	\$ 6.00 - \$25.00	\$15.00
10' Blade	Hour	\$12.00 - \$45.00	\$20.00 & \$25.00
12' Blade	Hour	\$16.00 - \$45.00	\$20.00, \$25.00 & \$30.00
Tiling			
Plastic Tubing	Rod	\$ 1.35 - \$ 9.00	\$ 1.50, \$1.65 & \$2.00
Concrete and Clay Tile	Rod	\$ 1.60 - \$ 6.00	\$ 1.65 & \$ 2.00
Backhoe	Hour	\$ 5.00 - \$30.00	\$12.00 & \$15.00
Dragline (1/2 Cu. Yard)	Hour	\$10.00 - \$25.00	\$20.00 & \$25.00
Stone Picking	Hour	\$ 5.00 - \$20.00	\$12.00
Rotary Mowing (Weeds & Brush)	Acre	\$ 1.50 - \$12.50	\$ 8.00 & \$10.00
Brush Chopping in Orchards	Hour	\$ 8.00 - \$12.50	\$ 8.00 & \$10.00
Cherry Harvesting	Pound	\$.04 - \$.07	\$.05 & \$.06
Buzzing Wood	Hour	\$ 5.00 - \$10.00	\$ 6.00
Chain Saw Work	Hour	\$ 3.00 - \$12.00	\$ 7.00 & \$10.00
Trucking - Hour	Hour	\$ 8.00 - \$20.00	\$13.00
- Mile	Mile	\$.12 - \$ 2.00	\$.50
Grinding Feed	Cwt.	\$.10 - \$.50	\$.15 & \$.20
Bulk Spreading Fertilizer			
-Acre	Acre	\$.50 - \$ 5.00	\$ 1.00 & \$ 1.50
-Ton	Ton	\$ 1.00 - \$ 8.00	\$ 2.00 & \$ 3.00
Apply Anhydrous Ammonia	Acre	\$ 1.00 - \$10.00	\$ 1.50, \$2.00, \$2.50
Shelling Corn	Bushel	\$.03 - \$.20	\$.05 & \$.10
Drying Corn - % points of moisture removed			
a. 0-5	Bushel	\$.01 - \$.07	\$.01 & \$.05
b. 6-10	Bushel	\$.01 - \$.16	\$.02 & \$.10
c. 11-15	Bushel	\$.05 - \$.26	\$.12 & \$.15
d. 16+	Bushel	\$.14 - \$.50	\$.09 & \$.20
Aerial Seeding	Acre	\$ 1.55 - \$ 2.00	\$ 1.75
Sheep Shearing	Head	\$.90 - \$.70	\$.75 & \$.80
Boring Post Holes	Hole	\$.12 - \$ 1.00	\$.50
Tree Planting	Thousand	\$.25	\$.25
Snow Plowing	Hour	\$ 2.00 - \$25.00	\$ 8.00 & \$10.00
Tractor - 3 Plow			
	Hour	\$ 4.00 - \$12.50	\$ 6.00, \$7.50 & \$10.00
4 Plow	Hour	\$ 5.00 - \$15.00	\$ 8.00 & \$12.00
5 Plow	Hour	\$ 6.00 - \$20.00	\$10.00 & \$15.00
6 Plow	Hour	\$ 5.25 - \$25.00	\$15.00

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. R. Nodland and H. G. Routh, Extension Pamphlet 154, 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. For computer help ask your extension agent for Telplan Program 03.

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?

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. C. Rouths, Extension Pamphlet 154, University of Minnesota, June 1961.