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Rates for Custom Work in Michigan Michigan State University Extension Service R.L. Meekhof and S. B. Nott, Agriculture Economics Issued May 1974 6 pages

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# Rates for Custom Work in Michigan

Extension Bulletin E-458 — Revised May 1974

By R. L. Meekhof and S. B. Nott Department of Agricultural Economics

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.





Cooperative Extension Service • Michigan State University

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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 H	lour
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 I \$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	Per Acre		Per Hour	
2-Row Self-Propelled Chopper & Blower With: 1 Man, 3 Magons 2 Men, 1 Tractor, 2-3 Magons	\$15.00 - \$18.00 n.a.	\$15.00 & \$18.00 n.a.	\$15.00 - \$40.00 \$20.00 - \$25.00	\$25.00 & \$30.00 \$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
COMBINING	Per	Acre	Per Hour	
Small Grain 5-9 Foot 10-12 Foot	\$ 5.00 - \$11.00 \$ 4.00 - \$15.00	\$ 7.00 \$ 7.00, \$8.00 & \$10.00	\$ 7.50 - \$12.00 \$ 8.50 - \$35.00	\$ 9.00 \$10.00, \$15.00 8 \$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 \$ 5.00 - \$20.00	\$ 8.00 & \$10.00 \$ 8.00, \$9.00 &	\$10.00 - \$30.00 \$10.00 - \$30.00	\$25.00 \$25.00
Alfalfa and Clover	\$ 7.00 - \$22.00	\$10.00 \$ 9.00, \$7.00 & \$12.00	\$10.00 - \$25.00	\$18.00
HAYING	Per Acre		Per Hour	
Mowing Raking Pull-Type Mower Conditioner	\$ 1.00 - \$ 4.00 \$ 1.00 - \$ 3.00 \$ 2.50 - \$10.00	\$ 2.00 & \$ 3.00 \$ 1.00 & \$ 2.00 \$ 3.00, \$4.00 &	\$ 6.00 - \$12.00 \$ 6.00 - \$12.00 \$ 9.00 - \$20.00	\$ 6.00 \$ 6.00 \$10.00
Self-Propelled Mower Conditioner	\$ 2.50 - \$ 6.50	\$5.00 \$ 3.50 & \$ 5.00	\$ 7.50 - \$15.00	\$12.00
FIELD BALING	Per Bale		Per Stack	
Hay (Twine) Straw (Twine) Hauling to barn Jig Dale Baling For Pulling Wagon Hee Holland Bale Wagon Heehanical Long Hay Stacking	\$ .08 - \$ .20 \$ .10 - \$ .25 \$ .08 - \$ .20 \$ .12 - \$ .25 \$ .01 - \$ .11 \$ .01 - \$ .17 \$ .05 - \$ .15	\$ .12 & \$ .15 \$ .17 \$ .10, \$.12 & \$.15 \$ .19 \$ .05 \$ .02 \$ .10	n.a.	n.a.
SILO FILLING	Per Foot Filled			
Tower   14 Foot   16 Foot   18 Foot   20 Foot   24 Foot   30 Foot	\$ 3.50 - \$12.00 \$ 5.00 - \$15.00 \$ 8.00 - \$20.00 \$ 7.00 - \$24.00 \$12.50 - \$20.00	\$ 5.00 \$ 6.00 \$10.00 \$10.00 \$ \$12.00 \$15.50 n.a.		
OTHER HARVESTING MORK	Per Acre		Per Hour	
Stalk Shredding Swathing Grain Digging Potatoes Harvesting Sugar Beets Bean Mindmowing	\$ 1.75 - \$ 6.00 \$ 2.25 - \$ 7.00 n.a. \$20.00 - \$30.00 \$ 1.25 - \$ 7.00	\$3.00 \$3.00 & \$4.00 0.8. \$25.00 \$3.00, \$4.00 & \$5.00	\$ 7.00 - \$10.00 n.a. n.a. n.a. n.a.	\$ 7.00 n.a. n.a. n.a.
MANURE HANDLING			Per I	lour
Yard Scraping Loading With Tractor Spreading and Hauling			\$ 3.00 - \$11.00 \$ 5.00 - \$15.00 \$ 5.00 - \$20.00	\$ 5.00 \$ 8.00 & \$10.00 \$ 5.00, \$8.00 & \$10.00

CUSTOM RATE SURVEY

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

Custom Job and Equip	ment	Range of Charges	Most Comm Charges	on Ra	nge of harges	Most Common Charges
PLOWING		<u>P</u>	er Acre		Per Hour	
3-Bottom 4-Bottom 5-Bottom		\$ 5,00 - \$10.00 \$ 4.00 - \$10.00 \$ 5.00 - \$10.00	\$ 6.00 \$ 6.00 \$ 6.00	\$ 8.0	0 - \$12.00 0 - \$15.00 0 - \$20.00	\$10.00 \$11.00 \$10.00, \$12.00 & \$15.00
6-Bottom 7-Bottom 8-Bottom		\$ 5.00 - \$ 8.00 \$ 5.00 - \$ 8.00 \$ 5.00 - \$ 7.00	\$ 6.00 \$ 6.00 \$ 6.00	7.00	0 - \$22.00 n.a. n.a.	\$16.50 n.a. n.a.
DISKING		<u>p</u>	er Acre	-	Per Hour	N STATE OF THE PARTY
8-Foot Tandem 10-Foot Tandem 12-Foot Tandem 14-Foot Tandem		\$ 2,50 - \$ 3,00 \$ 2,25 - \$ 8,50 \$ 1,50 - \$ 5,00 \$ 1,50 - \$ 5,00	\$ 2.75 \$ 3.00 \$ 3.00 \$ 2.00 & \$	\$10.0	0 - \$ 8.00 0 - \$12.00 0 - \$15.00 0 - \$15.00	\$ 8.50 \$10.00 \$12.00 \$15.00
DRAGGING			er Acre		Per Hour	
2-Section 3-Section 4-Section		\$ 1.75 - \$ 2.50 \$ 1.00 - \$ 7.50 \$ 1.50 - \$ 7.50	\$ 2.50 \$ 2.00 & \$ \$ 2.00	3.00 \$ 6.0 3.00 \$ 6.0	00 - \$ 9.00 00 - \$15.00 00 - \$15.00	\$ 7.50 \$10.00 \$10.00 & \$12.00
		1	Per Acre		Per Hour	
CULTIPACKING		\$ 1.00 - \$ 4.50	\$ 1.50	,	n.a.	n.a.
DRILLING		1	Per Acre		Per Hour	
With Fertilizer Without Fertilizer Band Seeding		\$ 1.75 - \$ 7.00 \$ 1.25 - \$ 6.00 \$ 1.00 - \$ 7.00	\$ 2.50 & \$ \$ 2.00 & \$ \$ 3.00 & \$	3.00 \$ 2.5 2.50 4.00	50 - \$21.00 n.a. n.a.	\$10.00 n.a. n.a.
			Per Acre		Per Hour	
PLANTING SUGAR BEETS		\$ 4.00 - \$ 7.00	\$ 4.00 - \$	6.00 \$10.	00 - \$12.00	\$10.00 & \$12.00
			Per Acre		Per Hou	
PLANTING POTATOES		\$ 7.00 - \$10.00	\$ 7.00 & \$	10.00 \$10.	00 - \$20,00	\$10.00
CULTIVATING			Per Acre		Per Hou	
4-Row Cultivator 4-Row Rotary Hoe		\$ 1.25 - \$ 3.50 \$ 1.00 - \$ 3.50	\$ 2.00 & \$ \$1.00		00 - \$10.00 \$10.00	\$ 8.00 \$10.00
PLANTING CORN			Per Acre		Per Hou	_
4-Row, No Fertilizer 40" Pows		\$ 2.00 - \$ 5.00	\$ 2.00 & \$	2.50		
4-Row, Fertilizer and Chemical 20" Rows 30" Rows 36" Rows	5	\$ 3.00 - \$ 7.00 \$ 2.00 - \$ 6.50 \$ 2.00 - \$15.00 \$ 2.00 - \$ 6.00	\$ 2.00 & \$ 5 3.00 & \$	4.00		
6-Row, No Fertilizer 30° Rows	. 34	\$ 2.50 - \$ 6.00	\$ 2.50 - \$	4.00		
6-Row, Fertilizer and Chemical 30° Rows 8-Row, No Fertilizer	15	\$ 1.75 - \$ 6.00		22		
8-Row, No Fertilizer 30" Rows 8-Row, Fertilizer and Chemical	s	\$ 1.50 - \$ 4.00				
30" Rows		\$ 3.00 - \$ 7.00	\$ 4.7	5		
HARVESTING CORN	Range of Charges	Most Common Charges	Range of Charges	Most Common Charges	Range of Charges	Most Common Charges
HARVESTING CORN	Per	Per Acre Per Bushel		shel		er Hour
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 Combine Shelling	\$ 6.00 - \$13.00 \$ 5.00 - \$20.00	\$10.00 \$10.00, \$11.00 \$ \$12.00	\$ .04 - \$ .09 \$ .04 - \$ .20	\$ .06 \$ .05	\$10.00 - \$35.0	n,a. 0 \$25.00
Field Grinding	\$11.00 - \$25.00	\$12.00	n.a.	n.a.	n.a.	0.0.

#### 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			24-100-1-100-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
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	Bushe1	\$ .03 - \$ .20	\$ .05 & \$ .10
Drying Corn - % points of			
moisture removed			
a. 0-5	Bushe1	\$ .01 - \$ .07	\$ .01 & \$ .05
b. 6-10	Bushel	\$ .01 - \$ .07 \$ .01 - \$ .16 \$ .05 - \$ .26 \$ .14 - \$ .50	\$ .02 & \$ .10
c. 11-15	Bushe1	\$ .05 - \$ .26	\$ .12 & \$ .15
d. 16+	Bushe1	\$ .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 \* \*

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

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.

١.	Ownership cost per unit (acre, bushel, ton, hour)		
	Original cost—salvage value		
	Depreciation: estimated life \$		
	Interest: Interest rate × 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 (bu., acre, ton, hour)	(A) \$	_
3.	Operating cost per unit (acre, hour, bushel, ton)		
	Tractor: Gas, oil, repair		
	Gal. gas per unit × price × 1.10†		
	Machine: Gas, oil, maintenance		
	Gal. gas per unit × price × 1.10†		
	Labor: Hours per unit × 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.		

<sup>\*</sup>Interest on declining balance basis.

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

<sup>\*\*</sup>Source: T. R. Nodland and H. G. Routhe, Extension Pamphlet 134, University of Minnesota, June 1961.

### Part III - Farm machinery - should you own it? \* \*

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

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.

Ownership Cost	
Original cost—salvage value	
Depreciation: estimated life	
Interest: Interest rate × original cost + 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 + estimate (bu., acre, ton, hour)	
Operating Cost per Unit	
Tractor: Gas, oil, repair	
Gal. gas per unit × price × 1.10†	
Machine: Gas, oil, maintenance	
Gal. gas per unit × price × 1.10†	
Labor: Hours per unit × wage rate. If acres, bushels, or to 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 i	t done?
Custom rate (see tables 1 and 2)	(E) \$
If ownership and operating cost exceed the custom rate, p operation are an important factor. One should also consider business.	purchase is not desirable unless loss of production and timeliness of alternative uses for capital and labor in another part of the farm
3. Determination 3-What acreage (or number of other units)	
Total ownership cost (A)  Custom rate—operating cost (E - C =)	acreage (or number of other units)
Custom rate—operating cost (E $-$ C $=$ ) 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 custon work is hired.  2) Parish to do with markler machine.

<sup>\*</sup>Interest on declining balance basis.

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

<sup>\*\*</sup>Source: T. R. Nodland and H. G. Routhe, Extension Pamphlet 134, University of Minnesota, June 1961.