# CUSTOM MACHINE WORK RATES IN MICHIGAN

# By

# **Barbara Dartt and Gerald Schwab**

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# TABLE OF CONTENTS

Introduction .	1
Sources of Data	a1
Using This Dat	a1
Figure 1.	Distribution of Responses to 2001 Custom Machine Work Rates Survey by Michigan Agricultural Statistic Service Crop Reporting Districts
Table 1.	Land Tillage Operations, Michigan, 2001
Table 2.	Planting Operations, Michigan, 2001
Table 3.	Fertilizer and Chemical Applications, <sup>1</sup> Michigan, 2001
Table 4.	Trucking or Hauling, Michigan, 2001
Table 5.	Grain and Silage Harvesting Operations, Michigan, 2001
Table 6.	Management Services, Michigan, 2001
Table 7.	Hay Harvesting Operations, Michigan, 2001
Table 8.	Manure Handling and Miscellaneous Operations, Michigan, 2001
Table 9.	Machinery Rental Operations, Michigan, 2001
Table 10.	Custom Farming Rates, Michigan, 2001
Table 11.	Building Rental, Michigan, 2001
Table 12.	Other Custom Work, Michigan, 2001
Appendix A.	Survey Cover Letter
Appendix B.	2001 Custom Machine Work Rates Survey

## CUSTOM MACHINE WORK RATES IN MICHIGAN

by

### Barbara Dartt and Gerald Schwab\*

#### Introduction

Custom work can be an economically desirable alternative for both the buyer and seller of the machine-labor service combination. The problem continually encountered in this arena is often expressed as "What is a fair charge?" or "How much should I pay?" for the item in question. Data in this bulletin help provide some answers to these questions.

The custom work phenomenon has the potential of being a win-win event for both the buyer and seller of the machine service. The custom work package usually includes the machine, operator, fuel, and repairs required to keep the machine operating. Hiring custom work services enables farmers who have limited time, skills, investment capital, and/or land base to employ modern machine technology. For the owner of the machine, performing custom machine services can provide supplemental income in situations where excess labor and machinery capacity are available.

Because there is no standardized market structure for machine services, determining a fair price for custom work continues to be difficult. Economics suggests that the price should be a function of the demand for and the supply of the custom work services available. Because the transportation cost of the machine service is high, relative to the potential income earned, the geographical market area for many machine services is quite limited.

Presented in this publication are the most recent Michigan price data for tractor rental rates and custom work machine services.

### **Sources of Data**

Data were originally gathered via mail survey to 923 potential respondents in the Spring of 2001. The geographical distribution of the 235 usable responses is presented in Figure 1. Data presented include the number of survey respondents, range in reported rates, the average rate, the standard deviation<sup>1</sup> and the coefficient of variation<sup>2</sup> (CV).

### Using This Data

The **average rate or price** can provide a benchmark or guide in determining custom work rates for each unique situation. Please note that the rates reported are not recommended rates. The reported rates for custom machine services may not reflect the total cost of the service. This situation can occur because the service is being provided by someone who has excess machinery capacity and views custom work as supplemental to his/her own farm income. Also, each location and machine service is unique. The range in rates, the standard deviation, and coefficient of variation indicate how close each reported rate is to the average. A more narrow range and a smaller CV indicate the tendency of the reported rate to be in the neighborhood of the average; and conversely, for a wider range of rates and larger CV.

<sup>\*</sup>Former and current Extension Specialists, respectively, in the Department of Agricultural Economics at Michigan State University. The authors acknowledge the assistance provided by Ned Birkey, MSU Extension Agricultural Agent, in identifying potential respondents in the survey.



Figure 1.Distribution of Responses to 2001 Custom Machine Work Rates Survey by<br/>Michigan Agricultural Statistic Service Crop Reporting Districts

Operation	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	$CV^2$
		Per A	cre		
Moldboard Plowing	40	\$10.00 - 30.00	\$15.00	\$3.54	24%
Chisel Plowing	37	9.00 - 18.00	12.50	2.38	19
Mulch-Tiller (disk-chisel)	23	9.00 - 18.00	13.15	2.10	16
V-Ripping (14-inch depth)	21	8.00 - 25.00	15.75	3.28	21
Tandem Disking	35	5.00 - 25.00	10.15	3.68	36
Offset Disking	6	10.00 - 30.00	15.20	7.55	50
Cultimulching	12	6.00 - 12.00	8.55	1.90	22
Spring Tooth Harrow	8	3.00 - 10.00	7.20	2.08	29
Spike Tooth Harrow	5	4.00 - 10.00	6.75	2.26	34
Rotary Hoe	10	3.00 - 10.00	5.05	1.96	39
Soil Finisher	16	7.00 - 16.00	11.25	2.64	24
Field Cultivator	23	4.00 - 15.00	8.40	2.77	33
Row Cultivator with Fertilizer	10	7.00 - 20.00	10.45	3.70	35
Row Cultivator without Fertilizer	10	5.00 - 15.00	7.35	2.99	41

# Table 1.Land Tillage Operations, Michigan, 2001

# Table 2.Planting Operations, Michigan, 2001

Operation	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	CV <sup>2</sup>
		Per Acre			
Small Grains					
Broadcast – Conventional	7	\$4.00 - 18.00	\$10.15	\$5.24	52%
Drill					
Conventional	18	5.00 - 20.00	11.25	4.55	40
Minimum	10	5.00 - 20.00	12.35	5.47	44
No-Till	35	8.00 - 25.00	15.30	3.73	24
Alfalfa, Clover, etc.					
Conventional	11	5.00 - 25.00	12.15	5.50	45
No-Till	13	4.00 - 18.00	13.45	3.93	29
Soybeans					
Row					
Conventional	17	5.00 - 20.00	13.15	4.15	32
Minimum	5	5.00 - 20.00	12.30	6.04	49
No-Till	12	8.00 - 25.00	16.25	4.45	27
Drill					
Conventional	20	5.00 - 20.00	12.45	4.30	35
Minimum	8	5.00 - 20.00	13.75	6.32	46
No-Till	54	8.00 - 23.00	14.80	3.55	24
Corn					
Conventional	42	5.00 - 25.00	13.80	4.83	35
Minimum	13	5.00 - 24.00	14.40	5.68	39
No-Till	42	7.00 - 30.00	17.70	5.12	29
Sugar Beets	5	12.00 - 20.00	15.20	2.95	19

Application	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	CV <sup>2</sup>
			Itato		
		Per A	cre		
Dry Bulk					
Equip Only	45	\$1.00 - 6.00	\$4.15	\$1.25	30%
Custom Application without GPS	45	2.00 - 10.00	4.80	1.81	38
Custom Application with GPS	17	4.00 - 9.00	5.75	1.51	26
Liquid-Knifed In					
Equip Only	10	1.00 - 11.00	6.05	2.99	50
Custom Application without GPS	8	3.00 - 9.00	6.50	2.05	32
Liquid-Ground Sprayer					
Equip Only	13	1.00 - 7.00	5.00	1.49	30
Custom Application without GPS	21	4.00 - 8.00	5.55	1.02	18
Anhydrous Ammonia					
Equip Only	8	2.00 - 15.00	9.80	4.52	46
Custom Application without GPS	13	6.00 - 14.00	9.65	2.59	27
Spreading Lime					
Equip Only	11	2.00 - 7.00	4.60	1.51	33
Custom Application without GPS	20	4.00 - 35.00	11.00	7.85	71
Custom Application with GPS	10	5.00 - 22.00	10.40	6.67	64
Aerial Spraying					
Equip Only	6	6.00 - 10.00	7.70	1.83	24
Custom Application without GPS	9	4.00 - 10.00	6.25	1.79	29
Custom Application with GPS	5	5.00 - 8.00	6.15	0.93	15
Self-Propelled Spraying					
Equip Only	19	3.00 - 8.00	5.10	1.11	22
Custom Application without GPS	48	2.00 - 12.00	5.55	1.60	29
Pull-Type Spraying					
Equip Only	12	4.00 - 7.00	5.15	1.05	20
Custom Application without GPS	12	4.00 - 17.00	6.15	3.58	58

# Table 3.Fertilizer and Chemical Applications,1 Michigan, 2001

<sup>1</sup>The prices listed reflect application only. Cost of materials is excluded.

Operation	Unit	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	$CV^2$
Crops						
Grain	/bushel	48	\$0.03 - 0.90	\$.17	\$.13	75%
Grain	/loaded mile	18	1.00 - 5.50	2.25	1.10	49
Sugar Beets	/ton	13	2.85 - 5.50	4.15	0.89	21
Livestock						
Cattle	/head	22	5.00 - 40.00	14.95	9.38	63
Cattle	/cwt.	10	0.60 - 2.50	1.56	0.75	48
Cattle	/loaded mile	5	1.35 - 2.20	1.79	0.35	20
Milk	/cwt.	20	0.36 - 0.60	0.48	0.06	13

## Table 4.Trucking or Hauling, Michigan, 2001

### Table 5. Grain and Silage Harvesting Operations, Michigan, 2001

Operation	Unit	Surveys	Range in Rates	Average Rate	St.Dev. <sup>1</sup>	$CV^2$
Combining						
Corn	/acre	109	\$17.00 - 33.00	\$22.90	\$2.86	13%
Soybeans	/acre	94	15.00 - 35.00	22.85	2.92	13
Wheat and Small Grains	/acre	81	15.00 - 30.00	21.30	2.85	13
Dry Beans	/acre	6	20.00 - 25.00	23.10	2.06	9
Picking Ear Corn	/acre	7	15.00 - 35.00	21.85	8.28	38
Shredding Corn Stalks	/acre	8	4.00 - 12.00	7.90	2.95	37
Sugar Beet Lifting	/acre	9	50.00 - 80.00	64.45	10.14	16
Corn Silage						
Field Chopping with kernel processor	/ton	5	2.00 - 4.00	3.10	0.63	21
Field Chopping with kernel processor	/hour	8	90.00 - 400.00	211.25	98.48	47
Field Chopping without kernel processor	/hour	7	20.00 - 100.00	67.14	26.44	39
Chop & Haul with kernel processor	/ton	5	5.00 - 7.00	5.30	1.02	19
Grain Drying						
Corn	point	14	0.02 - 0.06	0.03	0.01	36
Silage Bagging	/bu.					
9 ft. Diameter Bag	/ft.	5	4.60 - 9.00	6.05	1.74	29

# Table 6.Management Services, Michigan, 2001

Activity	Unit	Surveys	Range in Rates	Average	St. Dev. <sup>1</sup>	CV <sup>2</sup>
				Rate		
Accounting	/hour	13	\$12.00 - 125.00	\$63.85	\$38.73	61%
Crop Scouting for Weeds	/acre	7	0.83 - 7.00	3.10	2.44	78
Crop Scouting for Insects	/acre	6	0.83 - 30.00	10.75	12.42	115
Crop Scouting for All Pests	/acre	7	0.83 - 11.00	3.60	3.68	102
Estate Planning	/hour	9	85.00 - 200.00	137.80	39.85	29
GPS Grid Sampling	/acre	11	1.00 - 12.00	6.95	3.32	48
GPS Grid Sampling	/hour	5	5.00 - 60.00	17.60	23.73	135
Traditional Soil Sampling	/acre	11	0.70 - 4.00	1.90	1.14	61

Operation	Unit	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	$\mathrm{C}\mathrm{V}^2$
Нау						
Mowing and Conditioning	/acre	31	\$4.00 - 15.00	\$10.25	\$2.85	28%
Mowing and Conditioning	/hour	9	10.00 - 90.00	47.80	25.78	54
Raking	/acre	19	2.00 - 12.00	4.50	2.36	53
Haylage						
Field Chopping Only	/hour	6	100.00 - 350.00	237.50	106.95	45
Chop, Haul, Pack, Blow	/hour	5	160.00 - 575.00	335.20	215.24	64
Baling Hay						
Small Square Bales	/bale	24	0.20 - 1.50	0.50	0.28	57
Square Bales <1,000 lbs.	/bale	5	5.00 - 10.00	7.70	2.54	33
Large Square Bales	/bale	9	6.00 - 9.00	7.00	1.03	15
Round Bales <1,000 lbs.	/bale	31	4.00 - 9.00	6.00	1.28	21
Round Bales >1,000 lbs.	/acre	5	7.00 - 26.00	14.80	9.78	66
Round Bales >1,000 lbs.	/bale	23	3.00 - 10.00	6.25	1.40	23
Baling Straw						
Small Square Bales	/bale	21	0.20 - 1.25	0.45	0.23	50
Square Bales <1,000 lbs.	/bale	8	5.00 - 10.00	7.30	2.00	27
Round Bales <1,000 lbs.	/bale	20	4.00 - 12.00	6.25	2.04	33
Round Bales >1,000 lbs.	/bale	15	5.00 - 12.00	6.85	1.95	29
Cost of Entire Operation						
Small Square Bales	/bale	7	0.45 - 3.50	1.30	1.05	82
Hauling Bales						
Round Bales >1,000 lbs.	/bale	5	2.00 - 8.00	4.60	2.33	51

### Table 7.Hay Harvesting Operations, Michigan, 2001

# Table 8. Manure Handling and Miscellaneous Operations, Michigan, 2001

	1	1		r		
Operation	Unit	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	$CV^2$
Solid Manure						
Spreading Only	/hour	5	\$15.00 - 60.00	\$36.00	\$16.36	45%
Loading and Spreading	/hour	7	25.00 - 60.00	43.15	16.56	38
Liquid Manure						
Hauling and Spreading	/hour	5	50.00 - 250.00	109.60	82.27	75
Bulldozer Use	/hour	29	25.00 - 100.00	67.10	17.35	26
Chain Sawing	/hour	5	12.50 - 55.00	27.50	19.04	69
Tiling (digging - trenching only)	/ft.	7	0.16 - 0.40	0.26	0.10	37
Tiling (plowing or pulling-in only)	/ft.	8	0.15 - 0.32	0.21	0.06	28

Machinery	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	CV <sup>2</sup>
		Per H	lour		
Tractors Only					
Under 50 HP	5	\$9.00 - 35.00	\$18.80	\$11.05	59%
50-99 HP	16	10.00 - 45.00	24.05	8.52	35
100-149	21	6.00 - 55.00	28.60	11.47	40
150 HP and Over	16	15.00 - 65.00	34.55	12.36	36
4-wheel Drive <175 HP	6	15.00 - 65.00	43.85	19.14	44
4-wheel Drive >175 HP	15	15.00 - 100.00	47.90	26.64	56
Combines Only					
6-row and Larger /hour	12	50.00 - 270.00	95.45	56.71	59
6-row and Larger /acre	10	15.00 - 27.00	22.15	3.57	16

### Table 9.Machinery Rental Operations, Michigan, 2001

### Table 10. Custom Farming Rates, Michigan, 2001

Сгор	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	$CV^2$
		Per Ac	ere		
Corn	9	\$15.00 - 210.00	\$70.35	\$62.40	98%
Soybeans	9	15.00 - 155.00	58.70	48.05	84
Small Grains	5	16.00 - 80.00	46.20	28.76	62

### Table 11.Building Rental, Michigan, 2001

Building	Unit	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	CV <sup>2</sup>
Dairy Barn for Heifers and/or Dry Cows	head /month	6	\$0.35 - 6.00	\$3.15	\$2.00	63%
Grain Storage	bushel /month	21	0.01 - 0.06	0.03	0.01	45

# Table 12.Other Custom Work, Michigan, 2001

Activity	Unit	Surveys	Range in Rates	Average Rate	St. Dev. <sup>1</sup>	CV <sup>2</sup>
Backhoe	/hour	37	\$20.00 - 85.00	\$51.00	\$16.80	33%
Boring Post Holes	/hour	5	15.00 - 60.00	45.00	19.69	44
Hauling and Spreading Lime	/ton	8	4.00 - 16.50	11.30	5.28	47
Milking	/hour	9	7.00 - 15.00	9.55	2.23	23
Rotary Mowing (Weeds)	/hour	10	11.00 - 70.00	30.20	18.46	61
Snow Plowing	/hour	22	15.00 - 115.00	51.75	26.57	51

### Endnotes

- 1. Standard Deviation: The standard deviation provides an indication of how widely the data are distributed around the average or mean. The average value plus or minus one standard deviation would cover about two-thirds of the observations for each respective question, assuming the data are normally distributed.
- 2. Coefficient of Variation (CV): The coefficient of variation provides a measure of relative variation. It is calculated by dividing the standard deviation by the average. The lower the CV, the closer are the observed data to the average value. Lower CVs suggest that the average value presented is very representative of the values in the market place.

### Appendix A. Survey Cover Letter

February 2001

Dear Producer or Custom Operator,

Enclosed, please find a questionnaire on the costs of custom machine work rates. **Only answer those questions with which you are familiar.** We estimate that your responses should take 15-20 minutes. If you are not familiar with custom machine work rates in your area, please feel free to give this questionnaire to a neighbor who might be able to help out.

The Department of Agricultural Economics at Michigan State University occasionally conducts surveys to collect data on farm production costs. These data have been published as an Extension bulletin titled "Custom Work Rates in Michigan." This bulletin is one of the most popular with farmers and farm-related clientele.

The last time we collected information on custom machine work rates was in 1992. Obviously, times have changed and that data is out-of-date. With your help, we intend to publish a new Extension bulletin based on survey data from approximately 1,000 Michigan farmers and custom operators. We know we are imposing on your time and expertise. However, we need your assistance to ensure that data are representative of current costs in various Michigan areas.

Each questionnaire is individually coded to identify crop reporting district, county, and farm. This identification is necessary for data analysis, presentation, and any follow-up. Neither your name nor your farm's name will ever be individually identified. Your privacy will be protected to the maximum extent allowable by law. You indicate your voluntary agreement to participate in this project by completing and returning the enclosed questionnaire.

We would like to receive your response within the next couple weeks. A self-addressed, stamped envelope is enclosed for your use. To receive the results of this survey, please put your name and address at the bottom of the last page of the questionnaire. This personal information will not remain with the completed survey.

Thank you for your cooperation with this important survey. Our intention is to quickly tabulate this survey data and publish a new 2001 Custom Machine Work Rates Extension bulletin around July 1. If you have questions, please do not hesitate to contact either of us at the listed phone numbers.

Sincerely,

Gerry Schwab Professor, Farm Business Management 517-355-2153

Enclosures

Barbara Dartt Extension Specialist 517-353-4618

# 2001 CUSTOM MACHINE WORK RATES SURVEY







Michigan State University Department of Agricultural Economics Room 416-8 Agriculture Hall East Lansing, MI 48824

# Custom Machine Work Rates Survey Outline

# Торіс

# Page Number

Land Tillage Operations	1
Fertilizer and Chemical Applications	1
Planting Operations	1
Specialized Planting Operations	1
Grain Harvesting Operations	2
Hay Harvesting Operations	2
Other Harvesting Work	3
Trucking or Hauling	3
Silage Bagging	3
Manure Handling	3
Machinery Rental	3
Custom Farming Rates	4
Building Rental & Miscellaneous	4
Management Services	4
Includes Accounting, Crop Scouting,	
Financial Management, Soil Sampling, etc.	
Other Custom Work	4
Includes Backhoeing, Boring Post Holes,	
Building Fence, Hauling Lime, Milking, Rotary	
Mowing, Snow Plowing, Stone Picking, etc.	

# 2001 Custom Machine Work Rates Survey

Dear Producer:

Please report custom work rates that you charged others, or which you paid during 2000 or 2001. Answer only those questions with which you have experience. Please return this questionnaire even if you answer only one question. Facts about your business are kept confidential, and used only in combination with similar reports. Response is voluntary.

### LAND TILLAGE OPERATIONS: Include the cost of hiring power unit (tractor) with fuel, machine and

operator.						
Operation	Cost/Acre	Operation	Cost/Acre			
Plowing:		Cultimulching				
Moldboard		Spring Tooth Harrow				
Chisel		Spike Tooth Harrow				
Mulch-tiller (disc-chisel)		Rotary Hoe				
V-ripping (subsoiling)	Depth?	Soil Finisher ) 1-pass tool				
Disking:		Field Cultivator				
Tandem		Row Cultivator:				
Offset		With Fertilizer				
With Digger & Drag		Without Fertilizer				

### FERTILIZER AND CHEMICAL APPLICATIONS

	Cost/Acre					
Application Type	Equipment Only	Custom Applied Without GPS	Custom Applied With GPS			
Dry Bulk						
Liquid - knifed-in						
Liquid - ground sprayer						
Anhydrous Ammonia						
Spreading Lime						
Pesticide Spraying - Include herbic	ides, fungicides, and	insecticides				
Aerial Spraying						
Self-propelled Spraying (Big A						
Pull type Spraying						

### PLANTING OPERATIONS: Exclude cost of seed.

COST PER ACRE

Turne of Tillegre	Small Grains Alfalfa, Soybeans	Com	Applications Included with Corn					
Type of Tillage	Broadcast	Drill	etc.	Row	Drill	Corn	(please check all that were applied	
Conventional Till Planter							9Liquid Fertilizer 9Liquid Herbicide 9Liquid Insecticide	9Dry Fertilizer 9Dry Herbicide 9Dry Insecticide
Minimum Tillage Planter							9Liquid Fertilizer 9Liquid Herbicide 9Liquid Insecticide	9Dry Fertilizer 9Dry Herbicide 9Dry Insecticide
No-Till Planter							9Liquid Fertilizer 9Liquid Herbicide 9Liquid Insecticide	9Dry Fertilizer 9Dry Herbicide 9Dry Insecticide

### SPECIALIZED PLANTING OPERATIONS

Сгор	Cost/Acre
Potatoes	
Sugar Beets	
Other (please specify)	

Operation	Cost/Acre	Operation	Cost/Ton	Cost/Hour	Cost/Mile
Combining:		Corn Silage:			
Corn		Field Chopping Only 9 with kernel processor 9 without			
Soybeans		Chopping & Hauling 9with kernel processor 9without			
Wheat and Small Grains		Chopping, Hauling & Blowing or Packing 9 with kernel processor 9 without			
Dry Beans		Grain Drying (per bu):	Cents per Po	int of Moistur	e Removed
Alfalfa or Clover Seed		Corn			
Stripper Head Only		Other (please specify)			
Picking Ear Corn		Baling Corn Stalks	/bale		
Chopping/Stacking Corn Stalks for Feed or Bedding		Shredding Corn Stalks	/acre		

## **GRAIN HARVESTING OPERATIONS:** *Include cost of combine, driver and fuel.*

# HAY HARVESTING OPERATIONS

Operation	Cost/Acre	Cost/Hour	Operation	Cost/Acre	Cost/Bale
Making Hay:			Bale Wrapping:		
Mowing & Conditioning			Square Bales		
Raking (windrowing)			Medium (600-800 lbs.)		
Haylage Harvest:			Large (over 1,000 lbs.)		
Field Chopping Only			Round Bales		
Chopping and Hauling			Under 1,000 lbs.		
Chopping, Hauling & Packing or Blowing			1,000 lbs. & over		
Baling Hay:	Cost/Acre	Cost/Bale	Cost of Entire Ope	ration (mowing to	baling):
Square Bales			Square Bales (dry):	Cost/Acre	Cost/Bale
Small (25-60 lbs.)			Small (25 -60 lbs.)		
Medium (61-1,000 lbs)			Medium (600-800 lbs.)		
Large (over 1,000 lbs.) 9 with preservative 9 without preservative			Large (over 1,000 lbs.) 9 with preservative 9 without preservative		
Round Bales			Round Bales (dry):		
Under 1,000 lbs.			Under 1,000 lbs.		
1,000 lbs. & over			1,000 lbs. & over		
Baling Straw:	Cost/Acre	Cost/Bale	Hau	ling Bales:	
Square Bales			Square Bales (dry):	Cost/Ton	Cost/Bale
Small (25-60 lbs.)			Small (25 -60 lbs.)		
Medium (61-1,000 lbs)			Medium (600-800 lbs.)		
Large (over 1,000 lbs.)			Large (over 1,000 lbs.)		
Round Bales			Round Bales (dry):		
Under 1,000 lbs.			Under 1,000 lbs.		
1,000 lbs. & over			1,000 lbs. & over		

## **OTHER HARVESTING WORK**

Crop Harvested	Cost per Acre	Cost per Hour	Cost per Unit Weight
Potato Digging			/cwt
Sugar Beet Lifting			/ton
Bean Windrowing			/cwt
Blueberries (mechanically harvested)			/lb
Tart Cherries			/lb
Sweet Cherries			/lb
Grapes (mechanically harvested)			/lb

# **TRUCKING OR HAULING**

Basic charge per unit listed

Crops	Cost per Bushel	Cost per Unit Weight	Cost per Loaded Mile
Grain		/cwt	
Sugar Beets		/ton	
Нау		/ton	
Livestock	Cost per Head	Cost per Unit weight	Cost per Loaded Mile
Cattle		/cwt	
Pigs		/cwt	
Milk		/cwt	
Other (please specify)			

# SILAGE BAGGING

Diameter	Cost per Foot Including Bag
8-Foot Bag	
9-Foot Bag	
10-Foot Bag	

### MANURE HANDLING

Solid Manure:	Cost/Hour	Liquid Manure:	Cost/Hour	Cost/Gallon
Yard scraping		Pumping & Spreading		
Spreading Only		Haul & Spread		
Loading & Spreading		Haul & Knife-In		

MACHINERY RENTAL: Exclude charges for fuel and operator. RATE PER MACHINE HOUR

Tractors - If price included loader, place a check in the "9 loader" box.					
Tractor Type	Cost/Hour	Tractor Size	Cost/Hour		
Under 50 HP - 9 loader		150 HP and Over - 9 loader			
50 - 99 HP - 9 loader		4-wheel Drive Under 175 HP - 9 loader			
100 - 149 HP - 9 loader		4-wheel Drive Over 175 HP - 9 loader			
Skid Steer (Bobcat) - attachmen	-				
	s				
Size	Cost/Acre	Cost/Hour			
4-row and Smaller					
6-row and Larger					

## **CUSTOM FARMING RATES**

Crop	Cost/Acre	Tasks Included
Corn		
Soybeans		
Small Grains		
Forage		

BUILDING F	RENTAL IT LISTED	<b>MISCELLANEOUS</b> : Include the cost of hiring machine with fuel and labor.		
Dairy Barn for Milking	Per head/mo.	On-farm Feed Grinding	Per cwt.	
Dairy Barn for Heifers/Dry Cows	Per head/mo.	On-farm Grain Roasting	Per bu.	
Barn for Other Animals	Per head/mo.	Bulldozer Use	Per hr.	
Machinery Storage	Per mo.	Chain Sawing	Per hr.	
Machinery Storage	Per sq. ft./mo.	Tiling (digging - trenching only)	Per ft.	
Grain Storage	Per bu./mo.	Tiling (plowing or pulling-in only)	Per ft.	

# **MANAGEMENT SERVICES**

Activity	Cost/Acre	Cost/Hour	
Accounting			
Crop Scouting for Weeds (crop ID			
Crop Scouting for Insects (crop ID			
Crop Scouting for all Pests (crop ID			
Financial Management			
GPS Grid Sampling			
Harvest Timing Advice			
Traditional Soil Sampling			
Other (please specify)			

# **OTHER CUSTOM WORK**

Activity	Cost/Acre	Cost/Hour	Cost/Ton	Cost/Bushel
Backhoe				
Boring Post Holes				
Building Fence				
Barb Wire			/rod	
Woven Wire			/rod	
High-Tensile			/rod	
Hauling & Spreading Lime				
Milking				
Rotary Mowing (weeds)				
Rotary Mowing (brush)				
Snow Plowing				
Stone Picking				
Other (please specify)				

For the custom rates reported:

1.	Are you the custom operator? (you charged the	ese rates for work you performed)	☐ Yes☐ No	
2.	Would you like a free copy of the survey results ( <i>If yes, please fill in your address below.</i> )	;?	☐ Yes☐ No	
Na	me:	Address:		

City, State, Zip: \_\_\_\_\_

# Thank you for your help in completing this survey.

# **FIRM Mission Statement:**

To assist farmers, agriculturally related businesses, industries, families, and individuals to improve their lives and achieve their goals through an educational process that applies management, production, and economic knowledge to critical issues, needs, and opportunities.

### Field Based Firm AoE Team Members:

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