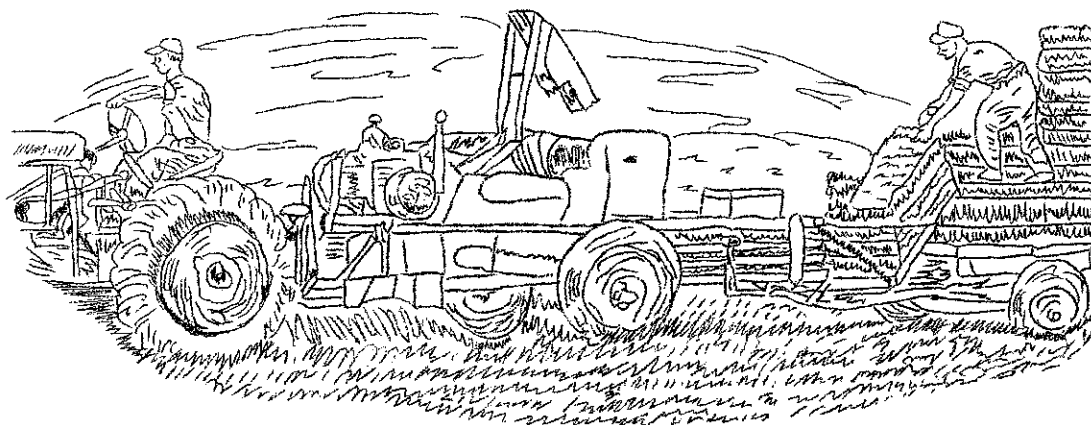


CUSTOM RATES FOR FARM MACHINERY IN NEW YORK STATE 1963



by

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CUSTOM RATES FOR FARM MACHINERY IN NEW YORK STATE

The trend to larger farm units and greater specialization has made it feasible for more commercial farmers to own most, if not all, of the machines they need to perform the mechanized operations on their growing farm operations. This has resulted in a steady decline in custom machine work of many types.

At the same time, the declining number of farms in many rural areas has reduced the opportunity to make custom work profitable. It appears that an increasing proportion of the custom jobs now being done are performed by farmers and other machine owners who are only incidentally interested in income from custom work.

Despite these trends, custom operators still perform a useful service for many New York farmers. Custom hiring is still the most economical solution for some machine tasks on many farms. Further, as new machines are developed, custom operation often serves to introduce them and pave the way for their general use.

Requests are regularly received by County Agents, Agricultural Leaders, and the College of Agriculture for current information on custom rates being charged. In order to meet the demand for information, surveys of custom operators have periodically been made. Earlier surveys were made in 1951, 1953, and 1957. The information in this report was obtained in the fall and winter of 1963-1964.

High School Vocational Agriculture Teachers and County Agricultural Agents obtained information from over 250 men in 46 counties who had performed custom jobs during 1963. Some of the operators contacted reported rates for only one or two jobs or machines. Others reported rates for a wide variety of jobs or machines. Teachers and Extension Agents transmitted the information obtained to the Department of Agricultural Economics, New York State College of Agriculture, for summarization.

Information obtained in the survey represents a wide range of working conditions. The rates reported are not recommended rates, but are those rates being charged. Circumstances will often justify a departure from the typical rates reported.

Trends in Custom Work

Of the jobs more frequently done on a hired basis, custom weed spraying and corn picking appear to be as common or more common than in years of previous surveys. Custom jobs which apparently have declined in importance include most tillage operations, combining, and baling.

Custom bulldozing and custom hiring of tractors with attached shovels, forks, blades, and backhoes seem to be more common than formerly. Custom spreading of fertilizer and lime is more common than formerly. Examples of specialized custom operations which have recently developed in one area are custom potato harvesting and custom irrigation in Suffolk County.

Rates charged for many but not all of the common custom jobs have increased since the last previous survey in 1957. The development of larger and more efficient equipment and the elimination of smaller field lots and jobs have undoubtedly helped to counteract increasing costs of machine ownership and of labor.

Method of Reporting

On the following pages is the information about all custom operations on which information was obtained. Table 1, page 3, of this report, summarizes the custom rates reported for the most common jobs.

In summarizing the reports all information received was first tabulated by geographic area. For the purpose of this report, the state was divided into the areas indicated on the map below. The number of reports received from each area is indicated on the map.

In general, rates reported were somewhat lower in Western New York than in other areas. Where the difference appeared significant, separate rates have been reported for Western New York and for other areas. In very few instances did rates reported vary significantly between the other areas designated.

The range of charges reported is given in the report for each major custom job. Rather than report an arithmetic mean or average, a "most typical" rate has been given in most cases. Unless otherwise indicated, rates reported are for the machine, tractor, and operator.

In most cases, the number of custom operators reporting each job is given. This gives the reader an indication of the amount of information on which each rate is based. It also gives some indication of the relative frequency of custom operations for the various jobs reported.

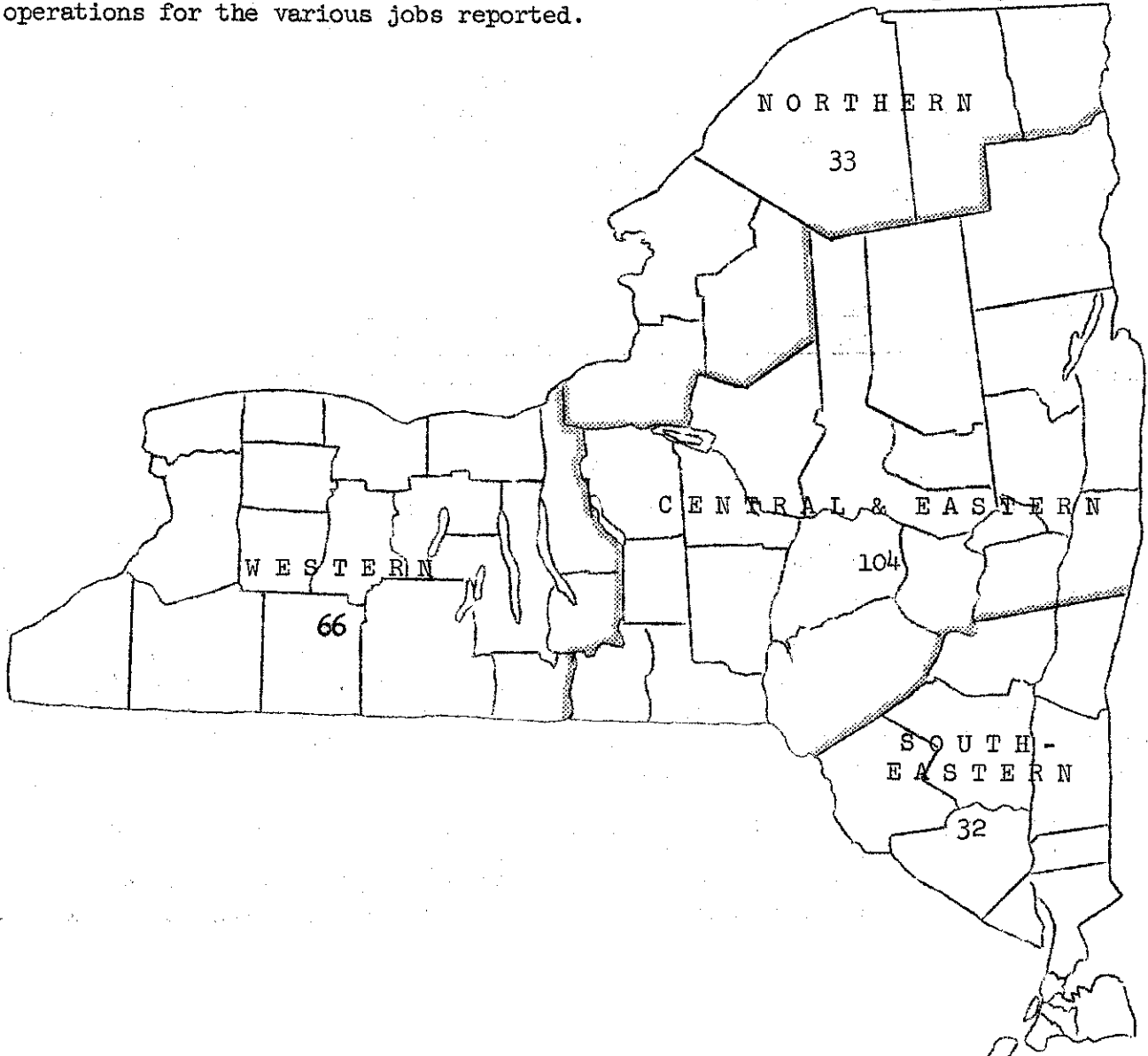


Table 1.

SUMMARY OF COMMON CUSTOM OPERATIONS
Custom Machine Rates in New York State, 1963

Custom job	Rate per hour		Rate per acre	
	Range	Most typical	Range	Most typical
	\$	\$	\$	\$
Plowing, 2 plow	3.50 - 10.00	5.00	3.00 - 7.00	5.00
3 plow	3.00 - 9.00	5.50	2.00 - 8.00	5.00
Harrowing, Drag	3.00 - 8.00	6.00	1.00 - 3.50	2.50
Disc	3.00 - 10.00	5.50	2.00 - 6.00	3.00
Corn planting, 2 row	3.50 - 5.00	4.00	1.50 - 6.00	3.00
4 row	-- --	--	2.00 - 4.00	3.00
Grain drilling	1.00 - 10.00	6.00	1.50 - 8.00	3.00
Cultivating	2.50 - 5.00	4.00	1.50 - 5.00	3.00
Weed spraying, corn and oats without materials	-- --	--	1.50 - 3.50	2.00
Weed spraying material included (2, 4-D)	-- --	--	1.00 - 4.00	2.50
Combining grain, self-propelled	5.00 - 20.00	8.00	5.00 - 10.00	8.00
pull type	7.00 - 12.00	8.00	5.00 - 12.00	7.00
Combining beans	-- --	--	11.00 - 12.00	11.00
Corn picking, 1 and 2 row	7.00 - 15.00	9.50	7.00 - 13.00	10.00
Corn picker-sheller	-- --	--	10.00 - 12.50	10.00
Mowing hay	2.00 - 10.00	5.00	1.00 - 5.00	2.50
Mow, crush, swath hay	-- --	12.00	3.00 - 6.00	4.00
Tractor and operator, tractor only	3.00 - 10.00	5.00	-- --	--
manure fork or shovel	3.00 - 10.00	6.00	-- --	--
blade	3.00 - 15.00	8.00	-- --	--
backhoe	7.00 - 15.00	10.00	-- --	--
Field chopping grass and corn	6.00 - 23.00	14.00	8.00 - 22.00	16.00
			Rate per bale	
			Range	Most typical
Baling hay		8 - 25¢		12¢
Baling straw		8 - 25¢		12¢
Baling hay or straw, kicker with baler		8 - 17¢		13¢

Tillage Operations

Charges for plowing, dragging, discing, and other tillage operations are commonly reported on a per acre basis in Western New York. In other areas it is as common to charge on an hourly basis as on a per acre basis for most tillage jobs. Rates for all tillage jobs are reported in Table 2 on both a per acre basis and a per hour basis.

Rates for dragging and discing were reported by size of drag or disc, but as the charges did not vary significantly by size of equipment, rates for all sizes were combined in this report.

Table 2. TILLAGE OPERATIONS
Custom Machine Rates in New York State, 1963

Job	Number reporting	Rate per acre	
		Range	Most typical
		\$	\$
Plowing, 2 plow	7	3.00 - 7.00	5.00
3 plow	18	2.00 - 8.00	5.00
4 or more	21	2.00 - 8.00	5.00
Harrowing, drag	9	1.00 - 3.50	2.50
disc	7	2.00 - 6.00	3.00
Corn planting, 2 row	15	1.50 - 6.00	3.00
4 row	26	2.00 - 4.00	3.00
Grain drilling	42	1.50 - 8.00	3.00
Cultivating	8	1.50 - 5.00	3.00
		Rate per hour	
Plowing, 2 plow	11	3.50 - 10.00	5.00
3 plow	17	3.00 - 9.00	5.50
4 or more	11	5.00 - 8.00	6.00
Harrowing, drag, 2 or 3 sec.	9	3.00 - 8.00	6.00
drag, 4 sec.	9	3.00 - 8.00	7.00
disc, under 10'	8	3.00 - 10.00	5.50
10' and over	8	5.00 - 9.00	7.00
Corn planting, 2 row	5	3.50 - 5.00	4.00
4 row	2	2.00 - 5.00	--
Grain drilling	9	1.50 - 10.00	6.00
Cultivating, 2 row	5	2.50 - 5.00	4.00

Rates for custom tilling operations run somewhat lower in Western New York than in other areas. For example, typical rates for plowing on both a per acre and per hour basis reported in Western New York were 50¢ lower than those reported above, and corn planting 50¢ less per acre.

Weed Spraying -- Oats, Corn and Meadow

Custom weed spraying in oats, corn, and meadow was one of the most common jobs reported. From the number of reports received, it seems obvious that this is one custom job which has not been declining in importance in recent years.

Table 3. WEED SPRAYING -- OATS, CORN AND MEADOW
Custom Machine Rates in New York State, 1963

Crop	Materials included		Rate per acre	
	No. reporting	Material	Range \$	Most typical \$
Oats	32	2, 4-D	1.25 - 4.00	2.50
	8	MCP	1.50 - 3.25	2.50
	17	Premerge, Sinox	2.00 - 5.25	3.50
	6	All other	1.25 - 3.00	2.50
Corn	34	2, 4-D	1.00 - 4.00	2.50
	8	Atrazine	6.00 - 14.00	9.00
	8	All other	1.25 - 4.00	2.50
Meadow	5	2, 4-D	1.25 - 2.75	2.50
	5	All other	1.75 - 2.50	2.50

Materials not included

Crop	No. reporting	Rate per acre	
		Range \$	Most typical \$
Oats and corn	29	1.50 - 3.50	2.00
All crops	3	2.00 - 2.50	--

Seven reports of hourly charges were received for spraying oats and corn. Charges reported were from \$4 to \$6 per hour.

Rates charged are reported as with or without materials. Where the custom application included the materials, the rates are classified by materials. Rates varied widely for the same material. This is partly explained by rate of application.

For the more expensive materials, such as Atrazine, rates were usually quoted at \$1.50 - \$2.50 per acre plus cost of materials. Rates of application were commonly in accordance with Cornell recommendations.

Other Spraying and Dusting

A few reports were obtained on other spraying and dusting jobs. For each job listed, only one to five reports were obtained.

Table 4. OTHER SPRAYING AND DUSTING
Custom Machine Rates in New York State, 1963

Job	Material	Rate
Spraying beans	Premerge	\$5.00-6.25 per acre
Seeded grain	Not specified	\$6.25 per acre
Golf course	2, 4-D	\$6.00-7.00 per hour
Bedstraw	Not specified	\$5.00 per hour
Grapes	Karnox and Dinitro	\$10.00 per 200 gallon tank
Alfalfa	Not included	\$2.50-3.00 per acre or \$10.00 per hour
Airplane dusting	Not included	\$.05 per pound
Fruit trees, dusting	Not included	\$.05 per pound
Speed sprayer	Not included	\$10.00 per hour
Brush	2, 4, 5-T	\$5.00 per hour

Spreading Lime, Fertilizer and Liquid Nitrogen

A sufficient number of reports were received on charges for lime and fertilizer applications to provide a brief summary.

Table 5. SPREADING LIME, FERTILIZER AND LIQUID NITROGEN
Custom Machine Rates in New York State, 1963

Job	No. of reports	Rate per acre	
		Range	Most common
		\$	\$
Spreading lime	7	2.00 - 9.00	4.00
Spreading fertilizer	5	1.00 - 6.00	4.00
Applying liquid nitrogen	5	1.50 - 2.50	2.00

Combining

A great majority of custom combining rates are on a per acre basis. Rates reported in Western New York are about \$1.00 per acre under those reported from other areas of the state.

Rates charged by operators of pull-type combines were about \$1.00 less on a per acre basis than those charged by operators of self-propelled machines.

Table 6. COMBINING GRAIN
Custom Machine Rates in New York State, 1963

Area	Self-propelled or pull type	Size cut	No.	Rate		
				Per acre		Per hour
				Range	Most typical	
Western N. Y.	Self-propelled	10' or under	12	\$6.00-10	\$7.00	\$5- 8
		Over 10'	24	5.50-10	7.00	--
	Pull type	6' or under	3	6.00- 7	6.00	--
		Over 6'	5	5.00- 8	6.00	--
Other Areas	Self-propelled	10' or under	37	6.50-10	8.50	8-20
		Over 10'	20	6.00-10	8.00	8
	Pull type	6' or under	22	5.00-12	7.50	7- 9
		Over 6'	12	5.00-10	7.50	6-12

Table 7. COMBINING BEANS
Custom Machine Rates in New York State, 1963

Size combine	No. reporting	Rate per acre	
		Range	Most typical
		\$	\$
33"	4	11.00 - 12.00	11.00
All other	6	10.00 - 12.00	11.00
		<u>Rate per bushel</u>	
All sizes	4	50¢	

Bean combining jobs were reported by size of combine, but rates reported were found to be about the same for combines of all sizes.

One report was received of threshing beans with a stationery thresher for 25¢ per bushel. One operator reported threshing grain for the straw in Southeastern New York. One combine operator reported \$1.00 per acre extra charge for chopping straw, \$2.00 for baling. A few reported extra charges of about \$1.00 per acre for supplying an extra truck or extra man.

Corn Picking

In Western New York, picking rates are commonly on a per acre basis, and 2 row pickers and picker-shellers predominate. In other areas, picking is as commonly done on a per hour basis and one row pickers still predominate.

Table 8. PICKING CORN
Custom Machine Rates in New York State, 1963

Job	No. reporting	Rate per acre	
		Range	Most typical
		\$	\$
1 row picker	42	6.00 - 12.00	9.00
2 row picker	20	7.00 - 13.00	10.00
Picker-sheller	12	10.00 - 12.50	12.00
		Rate per hour	
1 row picker	7	7.50 - 15.00	9.50
2 row picker	3	7.25 - 12.00	--

Grinding and Mixing Feed and Crop Drying

A limited number of reports were received on rates for feed grinding and mixing, and for crop drying. Reports on these jobs are summarized in Tables 9 and 10.

Table 9. FEED GRINDING AND MIXING
Custom Machine Rates in New York State, 1963

Job	No. reporting	Rate
Grinding and mixing	5	\$4.00-9.00 per ton
Grinding only	6	2.00-5.00 per ton
Mixing only	3	1.00-4.00 per ton

Table 10. CROP DRYING
Custom Machine Rates in New York State, 1963

Crop	No. reporting	Rate
Corn	6	10-15¢ per bushel or \$4.00-5.00 per ton
Small grain	6	6-15¢ per bushel or \$3.00-5.00 per ton
Beans	1	15¢ per bushel or \$5.00 per ton

Tractors and Attached Power Equipment

Custom rates for a tractor and operator and for a tractor, operator, and attached power equipment are summarized in Table 11.

Tractor make and size were reported in most instances, and tractors were then arbitrarily grouped as 2-plov, 3-plov, or larger.

Table 11. TRACTORS AND ATTACHED POWER EQUIPMENT
Custom Machine Rates in New York State, 1963

Equipment	Number reporting	Rate per hour	
		Range	Most typical
		\$	\$
Tractor & operator, 2-plov tractors	8	4.00 - 10.00	5.00
3-plov tractors	7	3.00 - 10.00	6.00
Large tractors	2	10.00	--
Tractor, operator & manure fork	11	3.00 - 8.00	5.00
Tractor, operator & shovel	7	4.00 - 10.00	7.00
Tractor, operator & blade	10	3.00 - 15.00	8.00
Tractor, operator & backhoe	9	7.00 - 15.00	10.00

Bulldozing

Forty-three different custom operators reported rates charged for bulldozing work. An arbitrary and informal size grouping of these bulldozers was made on the basis of information supplied as to make and size. The small, medium, and large classification in Table 12 is a result of this grouping. The most common makes and types of bulldozers reported were the J.D. 420, J.D. 440, and D6 and D7. These are reported again in the second section of Table 12.

Table 12. BULLDOZING
Custom Machine Rates in New York State, 1963

Size	Number reporting	Rate per hour	
		Range	Most typical
		\$	\$
Western New York - small	7	6.00 - 10.00	8.00
medium	3	10.00 - 15.00	--
Other Areas - small	19	5.00 - 15.00	9.00
medium & large	14	7.00 - 15.00	12.00
<u>Make</u>		<u>Rate per hour</u>	
JD 420	6	5.00 - 10.00	7.00
JD 440	4	8.00 - 10.00	10.00
D6 and D7	7	12.00 - 16.00	15.00

Trucking

Trucking rates were obtained from 27 different owners. A majority of these reports gave hourly rates for 1½ and 2 ton trucks ranging from \$4.00 - \$6.00 per hour. The remainder of the reports gave rates on a per hour, per mile, per ton, per bushel or per trip basis and were for trucks of various sizes.

Table 13. TRUCKING
Custom Machine Rates in New York State, 1963

Size or type	No. reporting	Rate
Pick-up	3	10¢ per mile, \$3.00 per trip, \$1.00 per hour
1½ - 2 ton	15	\$4.00-6.00 per hour - \$5.00 most common, \$2.50-3.00 per ton, \$6.00 per 1,000 gallons, 25-30¢ per mile
2½ - 3 ton	3	\$5.00-7.00 per hour, \$2.00 per ton
Dump-box	4	\$5.00-8.00 per hour, 5¢ per bushel
Tractor- trailer	2	\$10.00-12.00 per hour

Mowing and Other Haying Jobs

Charges for mowing hay on both a per acre and per hour basis were common. Rates charged for mowing did not vary with size of cut to any noticeable degree.

Six reports were received of custom mowing, crushing, and swathing in one operation. Custom crushing or crimping alone was reported in only five instances.

Raking hay at \$2.00 and windrowing at \$3.00 were each reported once. One operator reported doing the entire haying job -- mow, rake, bale, and haul to the barn, for 25¢ per 65# bale.

Table 14. HAY MOWING, CRUSHING AND RAKING
Custom Machine Rates in New York State, 1963

Job	No. reporting	Rate per acre	
		Range	Most typical
		\$	\$
Mowing - Western New York	10	1.00 - 3.50	2.00
- Other Areas	16	2.00 - 5.00	3.00
Crushing only, All Areas	4	1.50 - 4.00	3.00
Mow, crush, swath, All Areas	5	3.00 - 6.00	4.00
			<u>Rate per hour</u>
Mowing, All Areas	16	2.00 - 10.00	5.00
Crushing	1	3.00	--
Mow, crush, swath	1	12.00	--

Baling Hay and Straw

Rates for baling did not vary significantly by area, though charges for baling straw were slightly lower in Western New York. Otherwise there was little difference in rates reported for hay and straw.

Fifteen of the custom operators reported said they did operate with a bale kicker. Rates charged by these operators were only slightly higher than for other operators.

Rate per bale varied with size of bale to some degree, but many reported rates at or lower than the typical rates above for large bales of 60 pounds and over, and in some cases rates charged for 30-35 pound bales were at or above the typical rates listed.

Table 15. BALING HAY AND STRAW
Custom Machine Rates in New York State, 1963

Crop	Area	Number reporting	Rate per bale, all sizes	
			Range	Most typical
			¢	¢
Hay	Western	28	.08 - .15	.12
	Other areas	59	.09 - .25	.12
Straw	Western	23	.08 - .18	.12
	Other areas	31	.10 - .25	.14
Hay or straw, baler with kicker		15	.08 - .17	.13

Combining Potatoes

Nine instances of combining potatoes on a custom basis were reported from Suffolk County. Seven of these operators employed a trail-behind type combine, 2 self-propelled. The rates, men and machines furnished in each case are reported in Table 16.

Table 16. COMBINING POTATOES, Suffolk County

<u>Machines furnished</u>		Men furnished	Rate per acre
Tractors	Bulk bodies		
			\$
1	3	5	50.00
2	--	5	50.00
--	3	4	50.00
2	4	7	55.00
1	3	4	60.00
1	2	2-3	60.00
2	3	5	60.00
1	4-5	4	60.00
--	3	5	60.00

Field Chopping Corn, Grass and Oats

Custom field chopping is commonly done on an hourly basis in Western New York, and Southeastern New York, and on either an hourly or acreage basis in other areas.

Table 17. FIELD CHOPPING CORN, GRASS AND OATS
Custom Machine Rates in New York State, 1963

Region	No. reporting	Rate per hour	
		Range	Most typical
		\$	\$
Western	25	6.00 - 20.00	13.00
Northern	10	12.00 - 16.00	14.00
Central & Eastern	20	8.00 - 23.00	14.00
Southeastern	14	12.00 - 20.00	15.00
		Rate per acre	
All Areas	17	8.00 - 22.00	16.00

A wide range in rates for custom field chopping was reported. This range is partially accounted for by the variation in number of men and machines furnished by the custom operator.

In order to get a picture of chopping rates according to men and machines furnished, the total units of men and machines furnished by each operator were summarized. Unit values were arbitrarily assigned as follows:

Chopper and blower	=	8 units
One man	=	3 units
One truck or one tractor	=	3 units
One wagon	=	1 unit

Thus, a custom operator who furnished chopper and blower plus two men, two tractors, a wagon and a truck, furnished 24 units.

Table 18. FIELD CHOPPING RATES ACCORDING TO MEN AND MACHINES FURNISHED
Custom Machine Rates in New York State, 1963

Units furnished	No. reporting	Rate per hour	
		Range	Most typical
		\$	\$
Under 20	21	6.00 - 20.00	13.00
20 - 22	23	9.00 - 20.00	14.00
23 and over	25	10.00 - 20.00	15.00

Silo Filling

Eighteen operators reported custom rates for filling silos. In most cases, this was simply another way of reporting field chopping, as the field chopping operators furnished blower and in most cases got the chopped material into the silo.

Silo filling charges were reported as so much per ton, per foot in a silo of given diameter, or so much for the job of filling a silo of given size. Converted to a charge per ton, rates ranged from \$1.50 - \$4.00 per ton, with 12 reports in the \$2.00 - \$2.50 range.

Machine Rental

A few instances of machine renting were reported. Although too few reports of rentals on any one machine were received to provide a very meaningful picture, all reports received are listed in Table 19, and may be of interest and limited value.

Table 19.

MACHINE RENTAL
Custom Machine Rates in New York State, 1963

Machine	Number reporting	Rate
Post hole digger	2	10¢ per hole, or \$10-15 per day
Fertilizer spreader	2	\$5 per day
Corn picker, 1 row	3	\$3 per acre, \$4 per acre, \$35 per day
Corn shredder	2	\$2.50, \$5.00 per acre
Tractor and backhoe	2	\$7 per hour, \$10 per hour
Unloading wagon	1	\$3 per load, short haul
J.D. 420 dozer	1	\$5 per hour, meter basis
H.D. 10 AC. dozer	1	\$6 per hour
Tractor and loader	2	\$40 per day, \$35 per day
Rotary mower, 5'	1	\$2 per acre
Roto-mower or brush chopper	1	\$10-15 per day
York 3 ton disc	1	\$4 per hour
Grain drill	1	\$1 per hour
Chain saw	1	\$7 per day
Ford tractor and 2 bottom plow	1	\$2 per hour

Other Custom Operations

Rates were reported for various other custom operations. Many of them were reported only once, but still may be of some value as guides to others wishing to establish fair rates.

Table 20. MISCELLANEOUS CUSTOM OPERATIONS
Custom Machine Rates in New York State, 1963

Job	Number reporting	Rate and explanation
Irrigating	3	\$4-8 per hour - pipe supplied in one instance
Chain sawing	9	\$3-5 per hour - man and saw
Spray painting	2	\$3 per hour, one man - \$7 per hour, 2 men
Chopping brush	2	\$4 per hour, or \$5 with 2 men
Spraying cattle	4	\$5 minimum + 25-45¢ per head, depending on material
Whitewashing stables	2	20¢ per running foot, .005¢ per sq.'
Cleaning stables	1	.004¢ per sq.' - air compressor and operator
Fly spraying stables	1	.0075¢ per sq.'
Snow plowing	1	\$8 per hour, tractor and man
Flow gardens	1	\$10 per acre
Welding - electric or acetylene	1	\$4 per hour
Tiller	1	\$8 per hour - tractor, heavy tiller, and man
Spraying potatoes	1	\$5.25 per hour - spraying and truck to haul water
Pesticide spraying	1	\$20, flat fee under 7 acres; 8-15 acres, \$2.75 per acre; 16 a.+, \$2.50 per acre
Dynamiting	1	\$7 per hour - man, dynamite not included
Cutting wood	1	\$14 per thousand bd. ft., hardwood \$12 per thousand bd. ft., softwood
Bushog	1	\$1 per hour
Tree planting	1	\$16.50 per thousand
Snap bean harvesting	1	\$40 per ton on cleaned and graded basis, mounted harvester, boxes, 2nd tractor with lift, fuel, and trucking
Potato planting	1	\$15 per acre, 3 tractors, plow & clodbusters, 3 operators, 2 trucks with fertiveyors, four row planter. Farmer furnished all fuel.