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Custom Rates for Idaho Agricultural Operations — 1990-91

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Farming includes a great number of activities that require various types of skills and equipment. Unless a farm is quite large, the farm operator may not find it practical to own all of the necessary equipment. Some farmers solve this problem by trading equipment and labor with their neighbors. Hiring a custom operator to perform certain farm operations is more practical for most farmers. A custom operator may be one who specializes in custom operations or a neighbor who has the equipment and time to perform this function for a fee.

How much should be charged for custom operation? Specialized custom operators may charge to cover all costs plus profit. Those performing custom services for a neighbor may charge only enough to cover labor and variable machine costs. In areas where a considerable portion of farm work is done by custom operators, standard or traditional rates usually emerge, based on actual machine operating and ownership costs.

A problem arises, however, if no rates have been established or if established rates differ from reasonable costs. This publication is written to assist those who lack custom rate information. Rates published here are based on actual rates reported by farm custom operators in several areas of Idaho. These were actual rates charged, not estimates of costs. A procedure is suggested later for estimating fair custom rates where none have been established in the community.

Custom services can sometimes be hired at a lower cost than that incurred by owning the equipment. This is particularly true of small farms. For example, a grain combine may have an annual ownership cost of \$8,000 or more. If operating costs are \$8 per acre and custom costs are \$24 per acre, about 500 acres of crop must be harvested before ownership becomes as economical as custom hiring. This can be calculated as follows: Fig. 1 is based on this break-even calculation. It shows that the cost of owning and operating equipment is greater than custom hiring up to the break-even acreage. If the owner of the equipment uses it on more acres than the number needed to break even, the average cost per acre will be less than the amount required to hire a custom operator. These cost calculations are based on all costs, cash and non-cash. Non-cash costs include operator labor, depreciation for all equipment used and opportunity interest on the owner's equity. Cash costs are the more obvious ones such as fuel, repairs, hired labor, taxes and interest paid on equipment loans.

These costs are different for each farm or custom operator. They will vary by conditions under which the equip-



Fig. 1. Break-even average between ownership costs and custom hiring.

Annual ownership costs
Custom rate per acre – Operating cost per acre
= Annual depreciation, interest, taxes, insurance and housing (see Table 1
= Rate charged in the area for that service
= Fuel, maintenance, labor and other necessary inputs

ment is used. whether it was purchased new or used, changes in replacement costs, interest rates paid, quality of service and care given the equipment by the operator, the volume or number of acres covered and other items affecting cost. Calculations for new or used machinery are the same. The results will be different, however, if the used equipment was purchased at less than market cost or the operator is unusually good at operating and maintaining machinery. This may lengthen the useful life of the equipment.

Another consideration in the custom rate vs. ownership question relates to the availability of custom operators and the amount of waiting time required to begin the custom operation. Crops may be lost if the custom operator cannot begin work at crucial times such as harvesting or seeding. Each individual needs to determine the risk associated with timeliness. This will vary by crop, location and financial strength of the farmer.

Whether you are performing custom operations for others or are hiring custom operators, some guidelines to determine the custom rate may be useful.

Source of Data

During the spring and summer of 1991, custom operators and farmers in the four districts of Idaho were contacted about custom rates charged or paid for various farm operations. Names of contacts were obtained from Extension agricultural agents, classified sections of newspapers and farm operators. Respondents were contacted by telephone, mail or in person. Most rates reported were for the 1991 crop year. Most rates for harvest and other activities done late in the year were for 1990, however.

Custom Rates for Idaho Agriculture

The geography of Idaho is such that there are wide differences in topography, climate, soils and other variables affecting agricultural production. This has resulted in the development of a diverse agriculture with a wide variety of enterprises. Because of this great variability, production costs differ from one area to another and sometimes even between adjacent farms or ranches.

Custom rates are reported here according to the four agricultural areas defined by the Idaho Crop and Livestock Reporting Service. This does not eliminate the variability but does reduce it to a manageable level. These areas are shown in Fig. 2.

Northern Idaho's crop-producing areas are interspersed with forests and mountainous terrain. Principal crops consist of grain, hay, peas, lentils, grass seed and specialty crops. Very little of this cropland is irrigated.

Southwestern Idaho has a longer growing season than other parts of the state and produces a wider variety of crops. Most crops are grown using irrigation, but the area also has some dry farming and a considerable quantity of rangeland. Besides the typical field crops — grain, hay,





corn, potatoes, sugarbeets, onions — several fruits, vegetables, seed and other specialty crops are grown. Dairy and beef cattle production are both common to the area.

Southcentral Idaho is much like southwestern Idaho except that the growing season is shorter so fewer types of crops are grown. Mixed farming with crops and livestock is common with cash crops consisting of potatoes, sugarbeets, beans, corn, small grains and hay.

Southeastern Idaho has a still shorter growing season. Potatoes, grain and hay are the principal crops with livestock, mostly beef and dairy, also being prominent.

Because of the low rainfall in most parts of the Snake River Plain, irrigation is essential to agricultural production in each of the three southern areas. Farming practices, field size and shape and types of equipment used are all influenced by irrigation in these areas. Farming practices are comparable across the irrigated portions of southern Idaho, but northern Idaho is quite different. Northern Idaho does share some cultural practices and machinery types common to dryland grain-producing areas of eastern and southern Idaho. Appendix Tables 1 through 4 summarize the custom rate information collected in the survey. Each table presents reported custom rates for production and harvesting operations for major crops. For most entries, a range and average rate are given. Rates vary because of different conditions, different types of equipment and differences in means of determining rates. Costs of materials such as chemicals, seed and fertilizer are not included in the custom rates quoted. When such supplies are provided by the custom operator, their cost should be added to the custom rate.

Custom rates quoted here should be used as guidelines for specific operations, not necessarily as the rate to charge. Prevailing conditions such as weather, field shape and size and other factors affecting ease or difficulty of operation should be considered. The user should also be aware that rates quoted may not be representative of the whole area.

Calculating Machine Operating Costs

Information about custom operations and rates is not always available. If this is the case in your area, you may need to calculate the approximate cost of performing a particular task. The costs involved include machinery ownership costs and operational costs. Ownership costs are:

- annual depreciation
- interest on the value of the investment in machinery and equipment
- property taxes on the machine (if applicable)
- insurance
- shelter costs

Operational costs are those expenses directly related to the operation of a machine. Costs include:

- fuel and lubrication
- maintenance and repairs
- supplies used in the operation
- labor expenses

Your own records on the machines are the best basis for estimating costs. If records are lacking, you can make a cost estimate with a few calculations as shown in Table 1. Using a moldboard plowing operation as the example, costs must be calculated on both the tractor and plow. Costs of the two pieces of equipment are calculated separately because they are used a different number of hours, have different cost factors and a different rate of depreciation. In this calculation the tractor's cost per hour is \$18.48 and the plow cost per hour is \$13.25. Total cost for the operation is \$31.73, so if 2.5 acres are covered per hour, the cost per acre is about \$12.70. While this is not an exact calculation, it may be useful where no custom rate figures are available and you need to estimate the value of a custom operation.

The costs used in Table 1 are for illustration and the table should only be used as a format for calculating costs. Note that the labor is charged only once because only one operator is needed for both pieces of equipment. Avoid

Table 1. Estimating costs of operating farm machinery (example uses tractor and plow).

	Tractor	Implement (Plow)
Equipment		
1. Replacement cost ¹	\$25,000	\$8 800
2. Estimated life (years) ²	12	8
3. Salvage value	\$ 1.000	\$ 0
4. Average value ³	\$13,000	\$4,400
5. Annual hours of use	830	250
Annual ownership cost		
6. Depreciation ⁴	\$2,000	\$1,100
7. Taxes, housing, interest and		
insurance (see Table 3) ⁵	\$1,742	\$ 563
8. Annual ownership cost (6+7)	\$3,742	\$1,663
9. Ownership cost per hour (8/5)	\$4.51	\$6.65
Annual operating cost		
10. Repairs and maintenance per hour		
(Replacement cost/100 × factor in		
Table 2)	\$3.00	\$6.60
11. Fuel and lubrication ⁶	\$4.37	-
12. Labor ⁷	\$6.60	-
13. Materials needed (twine, etc.) ⁸	-	
14. Total operating cost per hour	\$13.97	\$6.60
(10 + 11 + 12 + 13)		
Total cost		
15. Total cost per hour (9+14)	\$18.48	\$13.25
16. Total cost of operation per hour	\$31	.73
17. Total cost per acre	\$12	.70
(Sal / acres per hour/2 5 acres)		

¹Replacement cost is the price of a new or used machine.

²Estimated life is related to annual use. Table 2 shows a life of 2,000 hours for the plow and 10,000 hours for the tractor. The tractor is used 830 hours per year and the plow 250 hours. These will vary with each operation.

³Average value is the new value plus the salvage divided by 2. It is the average value the machine has for its period of useful life.

⁴Depreciation for these calculations is straight – line:

cost - salvage/useful life

⁵Use the Table 3 factor for this machine times the average value. ⁶Gallons used per hour times the price times 1.15. The extra 15 percent covers lubrication cost.

7Labor cost is total wages per hour including Social Security and fringe benefits. This is multiplied by 1.1 to cover extra labor time involved for maintenance, repair and adjustment.

⁸If supplies (baling twine, seed, etc.) are furnished by the custom operator, they should also be included here.

double counting of labor or fuel. Also be sure to add the cost of materials such as chemicals, seed, twine and fertilizer that are supplied by the custom operator.

Two references dealing with estimating machinery costs are available through the University of Idaho Cooperative Extension System office in your county. They are PNW Extension Publication 346, *The Cost of Owning and Operating Farm Machinery in the Pacific Northwest*, by Robert L. Smathers and Gayle S. Willett, and MCUG 42, *MACHCOST, A Machinery Cost Analysis Program*, by Leroy Stodick and Robert L. Smathers.

Estimates by Smathers and Willett are based on new machinery costs and expected total hours of use during the life of the machine. The microcomputer cost analysis by Stodick and Smathers is designed to help estimate machinery costs based on figures supplied by the operator.

Table 2. Farm machinery field efficiency, field speed, estimated life and repair cost factors.

	Field eff	ficiency	Field sp	eed	Estimated	Total life	Repairs per
	Range	Typical	Range	Typical	life*	of list price	\$100 list price
	(%)	(%)	(mph)	(mph)	(hr)		
Tractors							
2 wheel drive and stationary					10,000	120	.012
4 wheel drive and crawler					10,000	120	.012
Tillage							
Moldboard plow	70 to 90	80	3.0 to 6.0	4.5	2,000	150	.075
Heavy-duty disk	70 to 90	85	3.5 to 6.0	4.5	2,000	60	.03
Tandem disk harrow	70 to 90	80	3.0 to 6.0	4.0	2,000	60	.03
Chisel plow	70 to 90	85	4.0 to 6.5	4.5	2,000	100	.05
Field cultivator	70 to 90	85	3.0 to 8.0	5.5	2,000	80	.04
Spring tooth harrow	70 to 90	85	3.0 to 6.0	5.0	2,000	80	.04
Roller-packer	70 to 90	85	4.5 to 7.5	6.0	2,000	40	.02
Mulcher-packer	70 to 90	80	4.0 to 6.0	5.0	2,000	40	.02
Rotary hoe	70 to 85	80	5.0 to 10.0	7.0	2,000	60	.03
Row crop cultivator	70 to 90	80	2.5 to 5.0	3.5	2,000	100	.05
Rotary tiller	70 to 90	85	1.0 to 4.5	3.0	1,500	80	.053
Planting							
Row crop planter:							
No-till tillage	50 to 75	65	2.0 to 4.0	3.0	1,200	80	.067
Conventional tillage	50 to 75	60	3.0 to 7.0	4.5	1,200	80	.067
Grain drill	65 to 85	70	2.5 to 6.0	4.0	1,200	80	.067
Harvaetar							
Corn nicker-sheller	60 to 75	65	20 to 40	25	2 000	70	035
Combine:	001070	00	2.0 10 4.0	2.0	2,000	10	
Pull-type	60 to 75	65	20 to 50	30	2 000	90	.045
Self-propelled	65 to 80	70	2.0 to 5.0	3.0	2,000	50	.025
Mower	75 to 85	80	4.0 to 7.0	5.0	2,000	150	.075
Mower-conditioner	55 to 80	75	3.0 to 6.0	4.5	2,000	80	.04
Side delivery rake	70 to 85	80	4.0 to 5.0	4.5	2,000	100	.05
Baler	60 to 85	75	2.5 to 5.0	3.5	2.000	80	.04
Big bale baler	55 to 75	65	3.0 to 5.0	3.5	2,000	80	.04
Long hav stacker	55 to 75	60	2.5 to 4.5	3.5	2,000	80	.04
Forage harvester:							
Pull-type	50 to 75	65	1.5 to 5.0	2.5	2,000	80	.04
Self-propelled	60 to 85	70	1.5 to 6.0	3.0	2,500	80	.04
Sugarbeet harvester	60 to 80	70	2.5 to 5.0	3.0	2,500	70	.028
Potato harvester	55 to 70	60	1.5 to 4.0	2.0	2,500	70	.028
Cotton picker or stripper	60 to 75	70	2.0 to 4.0	3.0	2,000	60	.024
Miscellaneous							
Fertilizer spreader	60 to 70	70	30 to 50	45	1 200	120	01
Boom-type spraver	50 to 80	65	3.0 to 7.0	6.5	1.500	70	.047
Air-carrier spraver	55 to 70	60	2.0 to 5.0	3.0	2 000	60	03
Bean puller-windrower	70 to 90	80	2.0 to 5.0	3.5	2.000	60	.03
Beet topper stalk chopper	60 to 80	70	2.0 to 3.0	2.5	2.000	60	.03
Forage blower					2,000	50	.025
Wagon					3,000	80	.027
successive and the second s							

Source: American Society of Agricultural Engineers Standards. ASAE Data: ASAE D230.4 p. 160. St. Joseph, MO, 1984.

*Estimated life and repairs are estimated for the total life of the machine. If used equipment is being considered, the hours of use expended at the time of purchase should be subtracted to get the remaining expected life.

Acres covered per hour can be estimated by timing your own operation or by using the following formula:

		machine width \times miles per hour \times	
A		field efficiency (%)	
Acres per nour =	=	825	

For example, if a machine 16 feet wide travels at 4 miles per hour and field efficiency is 70 percent the calculation is:

 $\frac{16 \times 4 \times 70\%}{825} = 5.4 \text{ acres per hour}$

Typical field efficiencies are shown in Table 2. Field efficiency is less than 100 percent because of overlap, turning time, time required to adjust and service machinery, to fill hoppers, etc.

Custom Rate Index

Custom rates change when costs associated with ownership and operation of farm machinery and equipment change. Four cost components were used to develop an index of custom rates from 1972 through 1990 (Table 4). This composite index was compiled from index numbers

Table 3.	Percentage of averag	e machine investment	charged for propert	y taxes, housing	a, interest and insurance (TH	II) for selected machines.
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	Cost item							
Machinery	Taxes	Housing	Interest	Insurance	Total			
			%					
Wheel tractor	1.2	0.3	11.0	0.9	13.4			
Crawler tractor	1.2	0.2	11.0	0.9	13.3			
Combine	1.2	0.5	11.0	2.1	14.8			
Potato harvester	1.2	1.4	11.0	0.6	14.2			
Bean cutter	1.2	1.1	11.0	0.6	13.9			
Self-propelled forage harvester	1.2	1.3	11.0	2.1	15.6			
Pull-type forage harvester	1.2	1.3	11.0	2.6	16.1			
Self-propelled windrower	1.2	1.1	11.0	2.1	15.4			
Bean windrower	1.2	1.1	11.0	0.6	13.9			
Hay rake	1.2	_	11.0	0.6	12.8			
Hay baler	1.2	1.9	11.0	0.6	14.7			
Self-propelled bale wagon	1.2	1.0	11.0	2.1	15.3			
Pull bale wagon	1.2	1.0	11.0	0.6	13.8			
Self unloading forage wagon	1.2	_	11.0	0.6	12.8			
Drills, planters	1.2	2.4	11.0	0.6	15.2			
Tillage equipment	1.2	_	11.0	0.6	12.8			
Spraver	1.2	_	11.0	0.6	12.8			
Pickup	1.2	1.2	11.0	5.2	18.6			
Truck	1.2	1.2	11.0	8.5	21.9			

Source: The Costs of Owning and Operating Farm Machinery in the Pacific Northwest, by Smathers and Willett; Pacific Northwest Extension Publication No. 346, September 1989. Tax and interest figures are adjusted.

Table 4. Index of farm input prices and custom rates, U.S., 1972 to 1990.

Year	Machinery	Fuel	Wages	Interest	Custom rate index	Percent change in custom rate index
			(1977 = 100	percent)		
1972 1973 1974 1975	54 58 66 81	54 57 79 88	63 69 79 85	47 55 65 77	56 60 70 83	0.07 0.17 0.19
1976	91	93	93	88	92	0.11
1977	100	100	100	100	100	0.09
1978	108	105	107	117	108	0.08
1979	120	137	117	143	124	0.15
1980	134	188	127	174	144	0.16
1981	149 .	213	138	211	160	0.11
1982	163	210	144	242	173	0.08
1983	173	202	148	250	179	0.03
1984	181	201	151	248	184	0.03
1985	180	201	154	228	183	- 0.01
1986	179	162	159	211	175	- 0.04
1987	180	161	166	189	175	0.00
1988	194	166	171	182	183	0.05
1989	200	181	185	177	191	0.04
1990	209	204	192	174	200	0.05

¹Machinery index is a composite of tractors, self-propelled and other machinery.

²The custom rate index is estimated by weighting machinery at 50 percent, fuel 15 percent, wages 25 percent and interest 10 percent.

Source: SRS, USDA Agricultural Prices, Annual Summary 1982, 1985 and 1986. Washington, D.C., June 1983, June 1986 and June 1987.

for machinery ownership cost, wage rates, fuel prices and interest rates weighted according to percentages of total cost. The custom rate index increased rapidly from 1974 through 1981. Since then increases have been modest and even negative for 1986. Figures for 1986 were 4 percent below those of 1985. The index increased again after 1987 by 4 or 5 percent per year.

This custom rate index is based on national cost and price data. Values for Idaho may be slightly different. This index should be a reasonable guide for making rough estimates of custom rate changes from year to year in the absence of actual cost data.

The custom rate index reflects costs for those operators using new equipment. Actual custom rates may lag the index somewhat because many custom operators use machinery and equipment purchased in previous years. Those using the index as a guide should also be aware that amounts of inputs used in different operations may vary considerably, and different weights for machinery, fuels, etc., may be appropriate. In actual practice, rates will also vary depending on conditions prevailing when the work is done. Cost of machine operation will vary considerably between clean and weedy fields, dry or wet soil, different weather factors, topography and various crop conditions.

Summary

Custom help for farm operations provides a reasonable way for farm operators to get work done when they don't have adequate machinery. Custom work also provides a way for machine owners to make more efficient use of their assets by spreading the costs over more units without acquiring more land.

Idaho farmers and custom operators were surveyed during 1991 to get approximate custom rates. These rates are shown in Appendix Tables 1 through 4.

Custom rates have increased rather consistently in recent years along with other farm production costs. Yearto-year increases fluctuated between 0 and 19 percent between 1972 and 1990. Production costs have shown more modest increases since 1980 and have changed very little since 1982. Modest increases have occurred in the past three years.

Appendix

Appendix Table 1. Northern Idaho custom rates, 1990-91.

		dents	range	rate	Operation	Unit	dents	range	rate
rencing (labor only)					Land preparation (cor	nt'd)	1.1		
Barbed-wire ¹					Cultiweed	acre	4	\$1.50-3.00	\$2.41
(4-strand)	foot	3	\$0.95-2.00	\$1.57	Cultipack	acre	1		\$3.00
Cedar (3 rail)	foot	5	\$0.80-1.75	\$1.28	Planting and seeding				
(2 rail)	foot	2	\$0.75-1.25	\$1.00	No till air				
Pole fence	foot	4	\$0.75-2.25	\$1.56	Small grains	0.010	2	¢10 00 05 00	¢01 67
PVC rail ²	foot	1		\$9.85	Sman grains	acre	0	\$10.00-25.00	\$10.00
	and a south		-1		Peas	acre	3	\$15.00-22.00	\$10.33
Dry	na equi	pment rent	al		Altalta/grass	acre	3	\$12.00-20.00	\$10.07
Broadcast	acre	4	\$4 50-5 50	\$5.03	Conventional drilling				
Air machine	acro	3	\$4.25-5.00	\$4.63	Small grains	acre	4	\$4.50-10.00	\$6.25
Chank in	acre	0	\$1.50.2.00	¢1.00		hour	1		\$55.00
Shank-in	acre	27	\$1.30-2.00	¢1.75	Peas and lentils	acre	2	\$4.50-5.00	\$4.75
Spreader rental	deu	2	\$1.25-1.50	¢60.50	Harveeting				
Aprial (100 lb)	day	2	\$00.00-05.00	\$02.50	Hav				
Aeriai (100 lb)	acre	4	\$4.25-5.50	\$4.90	Swath	acro	2	\$12 00-15 00	\$13 50
Liquid					Balo	acre	2	\$12.00-15.00	\$15.50
Injection	acre	3	\$5.50-6.00	\$5.82	Dale	hala	0	00 00 0 00	00 00
Drill-in	acre	3	\$4.00-6.00	\$4.75	2-string	bale	2	\$0.28-0.32	\$0.30
Anhydrous (rental)	acre	2	\$1.25-1.50	\$1.38	Hound	bale	1		\$7.00
Chemical application					Haui	ton			\$15.00
Aerial					Combining (usually in	ncludes	short haul)		
5 gallon	acre	8	\$3.50-5.25	\$4.41	Small grains	acre	7	\$22.00-40.00	\$33.35
5 to 7 gallon	acre	8	\$4,00-6,25	\$5.03	Legumes	acre	3	\$25.00-27.50	\$25.83
> 7 gallon	acre	8	\$4 25-7 00	\$5.69	(Swath)	acre	1		\$15.00
Cround	aoro	U	Q1.20 7.00	\$0.00	Bluegrass seed	acre	1		\$65.00
Ground	0010	0	¢2 00 2 50	¢0.05	Dacture rental	ALIM	A	\$8.00-11.00	\$9 75
Flactor	acre	E A	\$2.00-2.50	\$2.20	rasture rentai	AOIVI	-	φ0.00-11.00	φ0.70
Floater	acre	4	\$4.00-4.25	\$4.00	Equipment rental				
Ріскир	acre	4	\$3.75-5.50	\$4.31	Tractors ³	hp/hr	2	\$0.13-0.15	\$0.14
Sprayer rental	acre	4	\$1.35-1.50	\$1.43	Combine				
Land preparation					(1st 50 hours)	hour	3	\$40.00-65.00	\$49.17
Moldboard plow					Large capacity				
Sod	acre	4	\$12.00-20.00	\$14.75	22' to 25' header	hour	1		\$135.00
Stubble	acre	4	\$10.00-12.00	\$10.50	Chisel plow	acre	2	\$4.00-6.00	\$5.00
Chisel plow	acre	2	\$10.00-15.00	\$12.50	Rod weeder	acre	2	\$3.50-6.00	\$4.75
Disk					Disk (offset)	acre	2	\$4.00-6.00	\$5.00
Tandem	acre	4	\$4.50-5.25	\$4.88	Grain drill	acre	2	\$4.00-6.00	\$5.00
Offset	acre	2	\$7.50-8.00	\$7.75	Moldboard plow	acre	2	\$6.00	\$6.00
Harrow					Cultivator	acre	2	\$3.50-6.00	\$4.75
Spike	acre	5	\$1 50-3 75	\$2 69					
Springtooth	acre	3	\$3 50-4 50	\$4 17					

¹Barbed wire fencing techniques vary within and among regions. Rates vary with terrain, type of posts used and soil type.

²Includes materials.

 $^{3}160 \text{ hp} \times .14 = $22.40 \text{ per hour. Renter pays operating costs.}$

Table 2. Southwestern Idaho custom rates, 1990-91.

Concrete ditch construction Planting and seeding (cont'd) Bans Stit Stit 12 inch foot 2 \$4.25 \$4.25 Stats acres 1 Stit 16 inch foot 2 \$4.35.45.0 \$4.45 Cultivation acres 3 \$11.00-12.50 \$11. 16 inch foot 1 \$4.75 March a labor Detassel corn acres 2 \$150.00-500.00 \$325 98' netting + - - Thinning acre 4 \$33.00-40.00 \$33 16 inch foot 2 \$3.54.0 \$0.33 Sugarbeets - Thinning acre 2 \$30.04.00 \$33 16 inch foot 2 \$3.54.00 \$3.75 Tritigation labor - 4 pole - \$4.50.6.00 \$5.5 70 bit fence foot 2 \$3.50.4.00 \$3.75 Tritigation labor - \$4.50.6.00 \$5.5 Pott hole drilling hole drilling foot 2 <th>Operation I</th> <th>Unit</th> <th>Respon- dents</th> <th>Rate range</th> <th>Average rate</th> <th>Operation</th> <th>Unit</th> <th>Respon- dents</th> <th>Rate range</th> <th>Average rate</th>	Operation I	Unit	Respon- dents	Rate range	Average rate	Operation	Unit	Respon- dents	Rate range	Average rate
12 inch foot 1 44.15 Beans acre 1	Concrete ditch construct	ion				Planting and seeding (cont'd)			
14 inch foot 2 \$4.25 \$4.43 Cuttivation acre 3 \$11.00-12.50 \$11. 18 inch foot 2 \$4.354.50 \$4.43 Cuttivation Hand labor Sugarbeets acre 2 \$150.00-500.00 \$325 39" netting + - Sugarbeets acre 4 \$35.00-45.00 \$37 1-strand live - Sugarbeets acre 4 \$35.00-45.00 \$37 5 strand foot 2 \$3.5-4.0 \$0.38 Buchine cultivation acre 2 \$10.00 \$10 5 strand foot 2 \$3.50-4.00 \$3.37 Firigation labor Sugarbeets acre 1 \$4.25 \$4.26 \$4.26 \$4.26 \$5.26 </td <td>12 inch f</td> <td>foot</td> <td>1</td> <td></td> <td>\$4.15</td> <td>Beans</td> <td>acre</td> <td>1</td> <td></td> <td>\$11.00</td>	12 inch f	foot	1		\$4.15	Beans	acre	1		\$11.00
16 inch foot 2 \$4.35 St.75 Cuttivation Fencing (labor only)* 5 St.75 Hind labor Detassel corn acre 2 \$150.00-500.00 \$325. 9'' netting, acre 4 \$350.045.00 \$3325. Stand foot 2 \$2.59.35.05 Machine cuttivation acre 4 \$350.045.00 \$338.00-40.00 \$339.04	14 inch f	foot	2	\$4.25	\$4.25	Sugarbeets	acre	3	\$11.00-12.50	\$11.83
18 inch foot 1 \$4.75 Hand labor 98" netting + Detassal corn acre 2 \$150.00-500.00 \$3255 98" netting + Sugarbeets acre 4 \$35 00-46.00 \$325 98" netting + Sugarbeets acre 4 \$35 00-46.00 \$325 98" netting + Sugarbeets acre 4 \$35 00-46.00 \$37 9 ole foot 2 \$3.53-40 \$3.83 Bachine cultivation acre 2 \$38.00-40.00 \$33 9 ole foot 2 \$3.50-40.00 \$3.75 Trinining acre 2 \$38.00-40.00 \$33 Pole foot 2 \$3.50-40.00 \$3.75 Trinining acre 2 \$30.00-50.00 \$35 Pole foot 2 \$3.50-40.00 \$3.75 Trinining acre 1 \$45.60 \$5 Pole foot 2 \$5.00-65.00 \$5.07 Hand lines hour 3 \$45.60 \$5 Producta acre \$5.00-65.00 \$5.01 Hand lines hour	16 inch f	foot	2	\$4.35-4.50	\$4.43	Cultivation				
Fencing (labor only)* Declassel corn acre 2 \$150.00-500.00 \$325 9'' netting, Sugabaets Tinning acre 4 \$35.00-45.00 \$325 High Inabile foot 2 \$2.59-3.50 \$3.05 Machine cultivation acre 4 \$35.00-45.00 \$37 High Inabile foot 2 \$.35.40 \$0.38 Sugabaets acre 2 \$38.00-40.00 \$33 9 astrand foot 2 \$3.50-4.00 \$2.75 Firdigiton labor	18 inch f	foot	1		\$4.75	Hand labor				
T-strand live Timning acre 4 \$52,00-45,00 \$53,00 High Inealie foot 2 \$2,59-3,00 \$3,00 \$31 Satrand foot 2 \$3,35-40 \$0,38 Machine cultivation acre 2 \$31,000 \$31 Satrand foot 2 \$3,35-40 \$0,38 Machine cultivation acre 2 \$31,000 \$31 Apple fore foot 2 \$3,50-400 \$37,75 Firdigation labor 4 \$4,50-600 \$53 Pole force foot 4 \$1,50-300 \$2,82 \$36,00-600 \$55 Post hole drilling hole 4 \$1,50-300 \$32,80 \$4,50-6,00 \$53 Prodicast acre 6 \$6,00-9,50 \$7,50 Hay (alfala) \$4,50-6,00 \$53 Spreader rental acre 5 \$30,00-12,00 \$7,86 Swath acre \$2,50,00 \$2,25,00 \$3,50 \$3,50 \$3,50 \$3,50 3	Fencing (labor only) ¹ 39" netting +					De-tassel corn Sugarbeets	acre	2	\$150.00-500.00	\$325.00
Wood posts) foot 2 \$2.59-3.50 \$3.05 Hoeing acre 4 \$35.040.00 \$37 3 strand foot 2 \$3.5-40 \$0.38 Machine cultivation acre 2 \$10.00 \$10 3 strand foot 2 \$4.55-55 \$0.50 Thinning acre 2 \$38.00-40.00 \$33 Pole fonce foot 2 \$3.50-40 \$3.75-40 \$3.75-45 \$4.55-55 \$4 Pole fonce 4 \$1.50-30.00 \$2.36 Trinining acre 2 \$4.55-54 \$4 Pole fonce 4 \$1.00-150 \$1.21 Hand lines hour 3 \$4.55-50 \$2 Pr Bacader rental acre 5 \$5.00-10.00 \$3.65 Snuth acre 12 \$7.00-12.00 \$9 Bacader rental acre 12 \$7.00-12.00 \$9 Bacader rental acre 12 \$7.00-10.00 \$3.83 Such Such \$11 Such	1-strand live					Thinning	acre	4	\$35.00-45.00	\$39.50
High tensile Construct Construction Machine utivation Construction Storad Storad <th< td=""><td>(wood posts)</td><td>foot</td><td>2</td><td>\$2 59-3 50</td><td>\$3.05</td><td>Hoeing</td><td>acre</td><td>4</td><td>\$35 00-40 00</td><td>\$37.75</td></th<>	(wood posts)	foot	2	\$2 59-3 50	\$3.05	Hoeing	acre	4	\$35 00-40 00	\$37.75
Instructure foot 2 S.35:4.0 S.0.38 Maintifie Cultivation acre 2 S.10.00 S.10 3 strand foot 2 \$.45:5.55 S0.50 Thinning acre 2 \$.36.0-40.00 S0 4 pole foot 2 \$.3.50.4.00 \$.23.50.4.00 \$.23.50.4.00 \$.23.50.4.00 \$.23.50.4.00 \$.23.50.4.00 \$.23.50.4.00 \$.25.55 \$.25.	High tensile		-		40.00	Machine outination			¢10.00	\$10.00
Startand Itool Z \$4.55-55 \$0.50 Starting acre 2 \$38.00-40.00 \$39 Pole fence 4 \$1.50-3.00 \$2.35 Tringition labor 4 \$4.50-6.00 \$5 Post hole drilling hole 4 \$1.50-3.00 \$2.38 Hand lines hour 3 \$4.50-6.00 \$5 Post hole drilling hole 4 \$1.50-3.00 \$2.38 Hand lines hour 2 \$4.50-6.00 \$5 Pole fence (1/4 mile) lines hour 1 \$4.50-6.00 \$5 Prodecast acre \$6.00-9.50 \$7.50 Harvesting Havesting Havesting \$4.50-6.00 \$5 Arrial colo 1b) acre \$7.50-10.00 \$7.60 Bale acre \$2.50 \$0 Arriad acre \$7.50-12.00 \$9.10 2-string bale \$8.00-10.00 \$8.25 Ground bale \$8.00-10.00 \$8.25 Round bale \$8.00-10.00 <td>2 strand</td> <td>foot</td> <td>2</td> <td>\$ 35- 40</td> <td>\$0.38</td> <td>Machine cultivation</td> <td>acre</td> <td>2</td> <td>\$10.00</td> <td>\$10.00</td>	2 strand	foot	2	\$ 35- 40	\$0.38	Machine cultivation	acre	2	\$10.00	\$10.00
Statiation Internance acre 2 \$38,00-40,00 \$39 4 pole foot 2 \$3,50-40.00 \$3,75 Gravity flow hour 3 \$4,50-6.00 \$55 Post hole drilling hole 4 \$1,50-30 \$2,38 Gravity flow hour 3 \$4,50-6.00 \$55 Post hole drilling hole 4 \$1,50-30.00 \$2,38 Gravity flow hour 3 \$4,50-6.00 \$55 Products acre 6 \$6,00-9.50 \$7,50 Hrigation 1ine 2 \$7,7.00-12.00 \$9 Ar machine acre 6 \$7,50-12.00 \$9.10 3-string bale 14 \$.22-50 \$0 Liquid flagetion acre 7 \$5,00-10.00 \$8,60 Square (ton) bale 2 \$1,00-12.00 \$9 \$1 Aerial (100 lb) acre 7 \$5,00-6.50 \$5,64 Swath, bale and \$2 \$10.00-12.00 \$37 Ground<	5 strand	foot	2	\$ 45 55	\$0.50	Sugarbeets				
Proference 4 pole foot post 2 \$3.504.00 \$3.75 Irrigation labor Gravity flow bour hand lines 3 \$4.50-8.00 \$5.55 Post hole drilling broadcast acre 6 \$6.00-9.50 \$7.50 Hand lines hour 2 \$4.25 \$5.4 Dry Broadcast acre 6 \$6.00-9.50 \$7.50 Harvesting X \$4.25 \$5.23 Ari machine acre 5 \$6.00-10.00 \$8.67 Harvesting X \$4.26 \$5.23 Ari machine acre 5 \$5.00-10.00 \$7.60 Havesting Bale 10 \$2.25.00 \$5.20 Liquid injection acre 5 \$8.00-12.75 \$10.35 Round bale 7 \$3.50.00 \$7.50 Sidedress acre 7 \$5.00-6.50 \$5.64 Swath bale 4 \$6.00-10.00 \$8.25 Ground acre 7 \$5.00-6.50 \$5.64 Swath bale and \$5.00-0.00	5 strand	1001	2	\$.4555	\$0.50	Thinning	acre	2	\$38.00-40.00	\$39.00
4 pole foot 2 33.04.00 33.75 fravity flow hour 3 54.50-8.00 55 Post hole drilling hole 4 \$1.50-3.00 \$2.38 Gravity flow hour 2 \$4.25 \$4 Dry Broadcast acre 6 \$6.00-9.50 \$7.50 Wheel lines hour 1 \$4 Air machine acre 6 \$6.00-10.00 \$8.67 Hardelines hour 1 \$4 Aerial (100 lb) acre 7 \$5.00-10.00 \$7.86 Swath acre 12 \$7.00-12.00 \$9 Idquid acre 5 \$6.00-12.75 \$10.35 Square (ton) bale 4 \$.2250 \$0 Stacking ton 1 \$2.50-30 \$2 \$11 Haul ton 1 \$35.50-30 \$0 Ground acre 5 \$5.00-6.50 \$5.64 Swath bale 4 \$6.50-8.00 \$5 Stacking ton 1 con 2 \$25.00 \$25 \$26.00 \$25	Pole fence			00 50 4 00	00 75	Irrigation labor				
Post hole drilling hole 4 \$15.0-3.00 \$2.38 Barking indication For the second sec	4 pole	1001	2	\$3.50-4.00	\$3.75	Gravity flow	hour	3	\$4 50-6 00	\$5 17
Fertilizer application and equipment rental Introducts Introducts Optimizer	Post hole drilling	hole	4	\$1.50-3.00	\$2.38	Hand lines	hour	2	\$4.25	\$4.25
Dry (I/4 mile) ine 2 \$1.752.50 \$2 Broadcast acre 6 \$6.00-9.50 \$7.50 Wheel lines hour 1 \$4 Air machine acre 6 \$6.00-10.00 \$8.67 Harvesting starting	Fertilizer application and	equip	ment rent	al		(1/4 mile)	line	2	¢1 75 2 50	\$2.00
Dry Broadcast acre 6 \$6.00-9.50 \$7.50 Harvesting Number Indur 1 34 Air machine acre 6 \$6.00-9.50 \$7.50 Harvesting Starvesting Starve	Dry	. odaibi					line	2	\$1.75-2.50	\$2.00
Biolocitation acre 6 \$0.00-5.00 \$1.20 Harvesting Air machine acre 4 \$1.00-1.50 \$1.21 Hay (alfalfa) Spreader rental acre 4 \$1.00-1.50 \$1.21 Hay (alfalfa) Liquid acre 5 \$0.0-10.00 \$7.86 Swath acre 12 \$7.00-12.00 \$9 Liquid acre 5 \$0.0-10.00 \$9.10 3-string bale 14 \$2.25.00 \$0.00-10.00 \$8 Mark coll, cross, incorp. w/disk) Arring bale 7 \$3.55.00 \$5 \$6 Square (ton) bale 2 \$10.00-12.00 \$11 Haul ton 1 \$5.00-6.50 \$5.64 Stacking ton 2 \$25.00 \$25 Ground acre 7 \$5.00-6.50 \$6.25 Chop, haul and pack 1 \$10.00-12.00 \$7 Tractor acre 2 \$5.00-7.00 \$2.75 Chop, haul and pack 1	Broadcast	2010	6	\$6.00.9.50	\$7.50	vvneei lines	nour	1		\$4.25
Air machine acre 4 50.00-10.00 56.07 Hay (affafa) Spreader rental acre 7 \$5.00-10.00 \$7.86 Swath acre 12 \$7.00-12.00 \$9 Liquid injection acre 6 \$7.50-12.00 \$9.10 3-string bale 14 \$.22-50 \$0 Sidedress acre 5 \$80.012.75 \$10.35 Square (ton) bale 7 \$.35.50 \$00 Chemical application acre 7 \$5.00-6.50 \$5.64 Swath, bale and \$2 \$10.00-12.50 \$11 Aerial 5 5 \$00-10.00 \$6.34 stack ton 1 \$6 \$5.00-8.00 \$6 \$2 \$100-12.00 \$2 \$25.00 \$25 Ground acre 7 \$5.00-8.00 \$7.17 \$7 \$100-012.00 \$7 \$100 \$10 \$100.00 \$10 Marure hauling ton 2 \$5.07.00 \$21.58 \$100-12.00	Air machine	acre	6	\$6.00 10.00	\$9.50	Harvesting				
Spreader rental Aerial (100 b) acre 3 7 \$1.20 \$1.21 Swath Bale acre Bale 12 \$7.00-12.00 \$9 Liquid Injection (Mark-out, cross, incorp. w/disk) acre 5 \$7.50-12.00 \$9.10 3-string 3-string bale bale 14 \$.22-50 \$00 Mark-out, cross, incorp. w/disk) 5 \$60-12.75 \$10.35 Square (ton) bale 7 \$.35.50 \$00 Chemical application Aerial acre 7 \$5.00-6.50 \$5.64 Swath, bale and 5 \$2 \$10.00-12.50 \$11 Haul ton 7 gallon acre 7 \$5.00-6.50 \$6.34 Stacking ton 2 \$25.00 \$25 Ground acre 7 \$5.00-8.00 \$7.17 Chop, haul and pack ton 2 \$10.00-12.00 \$70 Moldboard plow 2 \$25.00-30.00 \$2.75 Chop, haul and pack ton 2 \$10.00-12.00 \$72 Moldboard plow Springtooth acre acre 8 \$7.50-10.00 \$7.93 Beans acre<12	Air machine	acre	0	\$0.00-10.00	0.07	Hay (alfalfa)				
Aerial (100 lb) acre 7 \$5.00-10.00 \$7.86 Bale St.00-10.00 St.10-10.00	Spreader rental	acre	4	\$1.00-1.50	\$1.21	Swath	acre	12	\$7 00-12 00	\$9.82
Liquid 2-string bale 14 \$.22.50 \$00 Injection acre 6 \$7.50-12.00 \$9.10 3-string bale 7 \$.33-5.50 \$00 (Mark-out, cross, incorp. w/disk) Sidedress acre 5 \$8.00-12.75 \$10.35 Square (ton) bale 2 \$10.00-12.50 \$11 Chemical application Aerial Stacking ton 1 \$6.50-8.00 \$5.50 Aerial Stacking ton 1 \$25.50-8.00 \$5.64 Swath, bale and \$5.50-8.00 \$7.50 5 gallon acre 7 \$5.00-8.00 \$6.34 stack ton 2 \$25.00 \$25 Ground Tractor acre 2 \$5.50-6.50 \$5.90 Chop, haul and pack ton 1 \$10 \$10 Manure hauling ton 2 \$2.50-300 \$21.58 Corn Corn Stuble acre 1 \$40 Moldboard plow Scod acre 7 \$18.50-27.00 \$21.58 Corn for grain acre 12 \$25.00-3.00<	Aerial (100 lb)	acre	/	\$5.00-10.00	\$7.80	Bale	aoro			
Injection acre 6 \$7.50-12.00 \$9.10 3-string bale 14 0-12-150 \$00 (Mark-out, cross, incorp. w/disk) Sidedress acre 5 \$8.00-12.75 \$10.35 Round bale 4 \$8.00-10.00 \$8 Sidedress acre 5 \$8.00-12.75 \$10.35 Square (ton) bale 4 \$8.00-10.00 \$8 Aerial 5 5 \$5.00-6.50 \$5.64 Stacking ton 4 \$6.50-8.00 \$7 5 to 7 gallon acre 7 \$5.00-6.50 \$5.64 Swath, bale and \$2 \$25.00 \$25 Ground Tractor acre 2 \$5.00-7.00 \$8.25 Silage \$11 \$10 Malure hauling ton 2 \$25.00 \$27 Chop, haul and pack ton 1 \$10 Maure hauling ton 2 \$2.50-3.00 \$2.75 Cutting acre 1 \$25.00-32.00 \$27 S	Liquid					2-string	halo	14	\$ 22, 50	\$0.31
(Mark-out, cross, incorp. w/disk) Soluting Date 7 5,00-50 50 50 Sidedress acre 5 \$8.00-12.75 \$10.35 Round bale 4 \$8.00-10.00 \$8 Chemical application Aerial Stacking ton 1 \$3 Aerial Stacking ton 1 \$6.00-12.50 \$5.7 5 to 7 gallon acre 7 \$5.00-6.50 \$6.64 Swath, bale and \$25.00 \$25.50 Ground acre 4 \$7.00-10.00 \$8.25 \$10.25 \$10.70	Injection	acre	6	\$7.50-12.00	\$9.10	2 string	balo	7	\$ 25. 50	\$0.42
Sidedress acre 5 \$8.00-12.75 \$10.35 Hound Date 4 \$5.00-10.00 36 Chemical application Square (ton) bale 2 \$10.01 bale 2 \$10.01-12.50 \$11 Aerial Stacking ton 4 \$6.50-8.00 \$7.50 5 to 7 gallon acre 7 \$5.00-6.50 \$5.64 Swath, bale and stack ton 2 \$25.00 \$25 Ground acre 3 \$6.00-8.00 \$6.34 stack ton 2 \$25.00 \$25 Ground acre 3 \$6.00-8.00 \$7.17 Chop, haul and pack ton 1 \$10 Pickup acre 3 \$15.00-52.50 \$5.90 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Moldboard plow Scatare \$15.50-6.50 \$5.90 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Stubble acre 7 \$18.50-27.00 \$21.58 Small grains	(Mark-out, cross, incorp	. w/disk	()			Dound	bala		\$.00-10-00	\$0.42 \$0.50
Chemical application Square (nn) Date 2 \$10.00-12.50 \$11 Aerial ton 1 Stacking ton 1 \$1 \$10.00-12.50 \$21.58 Silage \$10.00-12.50 \$21.58 Silage \$10.00-12.50 \$21.58 Legumes acre 12 \$25.00-32.00 \$21.58 Legumes acre 12 \$25.00-32.00 \$22.50 \$10.52 \$21.58 <td< td=""><td>Sidedress</td><td>acre</td><td>5</td><td>\$8.00-12.75</td><td>\$10.35</td><td>Hound</td><td>bale</td><td>4</td><td>\$0.00-10.00</td><td>\$0.0U</td></td<>	Sidedress	acre	5	\$8.00-12.75	\$10.35	Hound	bale	4	\$0.00-10.00	\$0.0U
Chemical application Hall ton 1 \$33 Aerial Stacking ton 4 \$6.50-8.00 \$73 5 to 7 gallon acre 7 \$5.00-8.00 \$6.34 stack ton 2 \$25.00 \$25 Ground acre 4 \$7.00-10.00 \$8.25 Slage Affalfa/grass Chop, haul and pack ton 1 \$10 Tractor acre 2 \$5.50-7.00 \$6.25 Chop, haul and pack ton 1 \$10 Pickup acre 5 \$5.06.6.50 \$5.90 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Manure hauling ton 2 \$2.50-3.00 \$2.75 Cutting acre 2 \$10.00 \$10 Moldboard plow Stade plow Stall grains acre 1 \$40 \$40 \$41 \$41 \$42 \$25.00-32.00 \$27 \$21.58 Legumes acre 1 \$40 \$42 \$40 \$42 \$42 \$40 \$46 \$46 \$46 \$46 \$46 \$46 \$46 \$46 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>Square (ton)</td> <td>bale</td> <td>2</td> <td>\$10.00-12.50</td> <td>\$11.25</td>						Square (ton)	bale	2	\$10.00-12.50	\$11.25
Aerial Stacking ton 4 \$5.50-8.00 \$7 5 gallon acre 7 \$5.00-6.50 \$5.64 Swath, bale and 2 \$25.00 \$25 > 7 gallon acre 7 \$5.00-8.00 \$6.34 stack ton 2 \$25.00 \$25 Ground Tractor acre 2 \$5.50-7.00 \$6.25 Chop, haul and pack ton 1 \$10 Manure hauling ton 2 \$25.00-32.00 \$275 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Moldboard plow Stacking acre 1 \$10 \$10 \$10 \$25 \$10.00 \$10 Sod acre 7 \$18.50-27.00 \$21.58 Small grains acre 1 \$40 Moldboard plow Sod acre 8 \$7.50-10.00 \$7.93 Small grains acre 1 \$40 Marrow Springtooth acre 1 \$6.00 (swath, windrow) acre 1 \$25.00 \$40 Grouyate hour 2 <td< td=""><td>Chemical application</td><td></td><td></td><td></td><td></td><td>Haul</td><td>ton</td><td>1</td><td></td><td>\$3.50</td></td<>	Chemical application					Haul	ton	1		\$3.50
5 gallon acre 7 \$5.00-6.50 \$5.64 Swath, bale and 5 to 7 gallon acre 7 \$5.00-8.00 \$6.34 stack ton 2 \$25.00 \$25 Ground Tractor acre 2 \$5.50-7.00 \$6.25 Silage Aifalfa/grass Chop, haul and pack ton 1 \$10 Triple-K acre 3 \$6.00-8.00 \$7.17 Corn Chop, haul and pack ton 3 \$10.00-12.00 \$7 Manure hauling ton 2 \$2.50-3.00 \$2.75 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Moldboard plow Sod acre 7 \$18.50-27.00 \$21.58 Legumes acre 12 \$25.00-32.00 \$27 Disk Tandem acre 8 \$15.00-22.50 \$18.58 Corn for grain acre 12 \$25.00-30.00 \$46 Harrow Springtooth acre 1 \$6.00 \$7.17 Sugarbeets acre 2 \$40.00 \$40 Harrow Springtooth acre 1 \$6.50-8	Aerial					Stacking	ton	4	\$6.50-8.00	\$7.13
5 to 7 gallon acre 7 \$5.00-8.00 \$6.34 stack ton 2 \$25.00 \$25 > 7 gallon acre 4 \$7.00-10.00 \$8.25 Silage Alfalfa/grass Alfalfa/grass Alfalfa/grass Chop, haul and pack ton 1 \$10	5 gallon	acre	7	\$5.00-6.50	\$5.64	Swath, bale and				
> 7 gallon acre 4 \$7.00-10.00 \$8.25 Silage Ground Tractor acre 2 \$5.50-7.00 \$6.25 Chop, haul and pack ton 1 \$10 Tractor acre 3 \$6.00-8.00 \$7.17 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Pickup acre 5 \$5.50-6.50 \$5.90 Corn Chop, haul and pack ton 3 \$10.00-12.00 \$7 Land preparation 2 \$2.50-3.00 \$2.75 Cutting acre 2 \$25.00-32.00 \$24 Moldboard plow Sod acre 7 \$18.50-27.00 \$21.58 Legumes acre 12 \$25.00-32.00 \$27 Disk Tradem acre 8 \$15.00-22.50 \$18.58 Corn for grain acre 12 \$25.00-40.00 \$32 Harrow Tradem acre 1 \$6.00 \$7.73 Hafalfa seed acre 2 \$40.00 \$46 Beans acre 2 \$55.00 \$35.00 \$7.17 Sugarbeets 50.120 <t< td=""><td>5 to 7 gallon</td><td>acre</td><td>7</td><td>\$5.00-8.00</td><td>\$6.34</td><td>stack</td><td>ton</td><td>2</td><td>\$25.00</td><td>\$25.00</td></t<>	5 to 7 gallon	acre	7	\$5.00-8.00	\$6.34	stack	ton	2	\$25.00	\$25.00
Ground Tractor acre 2 \$5.50-7.00 \$6.25 Alfalfalgrass Chop, haul and pack ton 1 \$10 Tractor acre 3 \$6.00-8.00 \$7.17 Corn Chop, haul and pack ton 3 \$10.00-12.00 \$7 Pickup acre 5 \$5.50-6.50 \$5.90 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Manure hauling ton 2 \$2.50-3.00 \$2.75 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Land preparation Corn Combining (usually includes short haul) Combining (usually includes short haul) Small grains acre 12 \$25.00-32.00 \$227 Disk acre 7 \$18.50-27.00 \$21.58 Legumes acre 1 \$40 Tandem acre 8 \$7.50-10.00 \$7.93 Beans acre 2 \$40.00 \$44 Harrow scre 1 \$6.00 \$7.17 Sugarbeets \$33.00-4.00 \$32 \$3.30-4.00 \$32	> 7 gallon	acre	4	\$7.00-10.00	\$8.25	Silaga				
Tractor acre 2 \$5.50-7.00 \$6.25 Charlange ass Chop, haul and pack ton 1 \$10 Triple-K acre 3 \$6.00-8.00 \$7.17 Corn 3 \$10.00-12.00 \$77 Pickup acre 5 \$5.50-6.50 \$5.90 Chop, haul and pack ton 3 \$10.00-12.00 \$77 Manure hauling ton 2 \$2.50-3.00 \$2.75 Chop, haul and pack ton 3 \$10.00-12.00 \$77 Land preparation Corn acre 2 \$15.00-22.50 \$18.58 Corn for grain acre 12 \$25.00-32.00 \$27 Sod acre 8 \$7.50-10.00 \$7.93 Beans acre 12 \$25.00-40.00 \$32 Harrow acre 1 \$6.00 \$7.17 Sugarbeets acre 2 \$40.00 \$46 Beans acre 2 \$35.00 \$35.00 \$7.17 Sugarbeets acre 2 \$40.00 \$46 Beans <td>Ground</td> <td></td> <td></td> <td></td> <td></td> <td>Alfalfa/grass</td> <td></td> <td></td> <td></td> <td></td>	Ground					Alfalfa/grass				
Triple-K acre 3 \$6.00-8.00 \$7.17 Chip, hali and pack ton 1 \$10 \$10 Pickup acre 5 \$5.50-6.50 \$5.90 Corn Corn 3 \$10.00-12.00 \$7 Manure hauling ton 2 \$2.50-3.00 \$2.75 Chip, haul and pack ton 3 \$10.00-12.00 \$7 Land preparation Sod acre 7 \$18.50-27.00 \$21.58 Legumes acre 1 \$400 Moldboard plow Sod acre 8 \$15.00-22.50 \$18.58 Corn for grain acre 1 \$400 Disk Tandem acre 8 \$7.50-10.00 \$7.93 Beans acre 2 \$40.00 \$40 Harrow Springtooth acre 1 \$6.00 \$7.17 Sugarbeets \$3.30-4.00 \$32 Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets \$3.30-4.00 \$32 Corrugating acre <td< td=""><td>Tractor</td><td>acre</td><td>2</td><td>\$5.50-7.00</td><td>\$6.25</td><td>Chap have and pack</td><td>+</td><td></td><td></td><td>\$10.00</td></td<>	Tractor	acre	2	\$5.50-7.00	\$6.25	Chap have and pack	+			\$10.00
Pickup acre 5 \$5.50-6.50 \$5.90 Corn Manure hauling ton 2 \$2.50-3.00 \$2.75 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Land preparation Moldboard plow acre 2 \$25.00-32.00 \$275 Cutting acre 2 \$25.00-32.00 \$10 Sod acre 7 \$18.50-27.00 \$21.58 Legumes acre 12 \$25.00-32.00 \$27 Disk acre 8 \$15.00-22.50 \$18.58 Corn for grain acre 12 \$25.00-40.00 \$32 Disk Tandem acre 8 \$7.50-10.00 \$7.93 Beans acre 2 \$40.00 \$40 Harrow Springtooth acre 1 \$6.00 \$7.17 Sugarbeets \$33.00-4.00 \$32 Rotovate hour 2 \$35.00 \$35.00 \$35.00 \$36.50 Top, dig and load ton 3 \$3.30-4.00 \$24	Triple-K	acre	3	\$6.00-8.00	\$7.17	Chop, naul and pack	ton			\$10.00
Manure hauling ton 2 \$2.50-3.00 \$2.75 Chop, haul and pack ton 3 \$10.00-12.00 \$7 Land preparation Moldboard plow Sod acre 7 \$18.50-27.00 \$21.58 Combining (usually includes short haul) Small grains acre 12 \$25.00-32.00 \$27.5 Stubble acre 8 \$15.00-22.50 \$18.58 Combining (usually includes short haul) Small grains acre 12 \$25.00-32.00 \$27.50 Disk Tandem acre 8 \$7.50-10.00 \$7.93 Beans acre 3 \$38.00-50.00 \$40 Roller acre 1 \$6.00 \$7.93 Beans acre 2 \$40.00 \$40 Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets Song and load ton 2 \$2.00 \$2.00 \$2.00 Land plane acre 2 \$10.00-10.50 \$11.38 Haul ton 2 \$2.00 \$2.00 Bedding up acre 2 \$7.00-10.00 \$8.33 Combine (grains) ho	Pickup	acre	5	\$5.50-6.50	\$5.90	Corn				07.00
Land breparation Cutting acre 2 \$10.00 \$10 Moldboard plow Sod acre 7 \$18.50-27.00 \$21.58 Combining (usually includes short haul) Small grains acre 12 \$25.00-32.00 \$27 Sod acre 7 \$18.50-27.00 \$21.58 Legumes acre 12 \$25.00-30.00 \$27 Disk Tandem acre 8 \$7.50-10.00 \$7.93 Beans acre 2 \$40.00 \$40 Moldboard plow acre 1 \$6.00 (swath, windrow) acre 1 \$25 Disk acre 1 \$6.00 \$7.17 Sugarbeets \$38.00-50.00 \$40 Harrow Springtooth acre 1 \$6.00 (swath, windrow) acre 1 \$26 Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets 50.12-0.0 \$27 Rotovate hour 2 \$35.00 \$35.00 Top, dig and load ton 2 \$2.00 \$26 Bedding up acre <td>Manure hauling</td> <td>ton</td> <td>2</td> <td>\$2 50-3 00</td> <td>\$2.75</td> <td>Chop, haul and pack</td> <td>ton</td> <td>3</td> <td>\$10.00-12.00</td> <td>\$7.33</td>	Manure hauling	ton	2	\$2 50-3 00	\$2.75	Chop, haul and pack	ton	3	\$10.00-12.00	\$7.33
Land preparation Combining (usually includes short haul) Moldboard plow acre 7 \$18.50-27.00 \$21.58 Sod acre 7 \$18.50-27.00 \$21.58 Stubble acre 8 \$15.00-22.50 \$18.58 Corn for grain acre 12 \$25.00-32.00 \$27.00 Disk Tandem acre 8 \$7.50-10.00 \$7.93 Haflafa seed acre 3 \$38.00-50.00 \$40 Harrow Springtooth acre 1 \$6.00 \$6.00 \$6.00 \$6.00 \$6.00 \$8.33.00-50.00 \$40 Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets \$2.00 \$22.00 Rolovate hour 2 \$35.00 \$35.00 \$36.50 Top, dig and load ton 3 \$3.30-4.00 \$32.30 Land plane acre 1 \$8.50 Top, dig load and haul ton 2 \$2.00 \$22.00 Bedding up acre 3 \$7	manaro nading	ton	2	42.00 0.00	42	Cutting	acre	2	\$10.00	\$10.00
Moldboard plow Small grains acre 12 \$25.00-32.00 \$27.52 Stubble acre 8 \$15.00-22.50 \$18.58 Legumes acre 12 \$25.00-32.00 \$27.52 Disk Tandem acre 8 \$7.50-10.00 \$7.93 Legumes acre 12 \$25.00-40.00 \$32 Harrow Springtooth acre 1 \$6.00 (swath, windrow) acre 1 \$26 Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets \$22.00 \$26 Rotovate hour 2 \$35.00 \$35.00 Top, dig and load ton 3 \$3.30-4.00 \$32 Land plane acre 1 \$8.50 Top, dig and load ton 2 \$2.00 \$26 Bedding up acre 2 \$10.00-10.50 \$10.25 Top, dig, load and haul ton 1 \$26 Corrugating acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$45 Corn acre <td>Land preparation</td> <td></td> <td></td> <td></td> <td></td> <td>Combining (usually in</td> <td>cludes :</td> <td>short hau</td> <td>)</td> <td></td>	Land preparation					Combining (usually in	cludes :	short hau)	
Sod acre 7 \$18.50-27.00 \$21.58 Legumes acre 1 \$40 Stubble acre 8 \$15.00-22.50 \$18.58 Corn for grain acre 12 \$25.00-40.00 \$32 Disk Tandem acre 8 \$7.50-10.00 \$7.93 Beans acre 3 \$38.00-50.00 \$46 Harrow Springtooth acre 1 \$6.00 (swath, windrow) acre 1 \$226 Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets \$3.30-4.00 \$226 Land plane acre 4 \$8.00-15.00 \$11.38 Haul ton 2 \$2.00 \$26 Corrugating acre 1 \$8.50 Top, dig and load ton 1 \$6 Bedding up acre 2 \$10.00-10.50 \$10.25 Equipment rental Tractors hp/hr² \$0.12-0.15 \$0 Small grains acre 3 \$7.00-10.00	Moldboard plow					Small grains	acre	12	\$25.00-32.00	\$27.67
Stubble acre 8 \$15.00-22.50 \$18.58 Corn for grain Corn for grain acre 12 \$25.00-40.00 \$32 Disk Tandem acre 8 \$7.50-10.00 \$7.93 Alfalfa seed acre 3 \$38.00-50.00 \$46 Harrow Springtooth acre 1 \$6.00 \$7.93 Beans acre 2 \$40.00 \$40 Harrow Springtooth acre 1 \$6.00 \$7.93 Beans acre 2 \$40.00 \$40 Harrow Springtooth acre 1 \$6.00 \$7.17 Sugarbeets \$33.30-4.00 \$32 Roller acre 4 \$8.00-15.00 \$11.38 Haul ton 2 \$2.00 \$22 Land plane acre 1 \$8.50 Top, dig, load and haul ton 1 \$6 Bedding up acre 2 \$10.00-10.50 \$10.25 Equipment rental Tractors hp/hr² \$0.12-0.15 \$	Sod	acre	7	\$18.50-27.00	\$21.58	Legumes	acre	1	QL0.00 01.00	\$40.00
Disk Tandem acre 8 \$7.50-10.00 \$7.93 Alfalfa seed Beans acre 3 \$\$3.00-50.00 \$42 Harrow Springtooth acre 1 \$6.00 (swath, windrow) acre 2 \$40.00 \$40 Harrow Springtooth acre 1 \$6.00 (swath, windrow) acre 2 \$40.00 \$40 Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets \$2.00	Stubble	acre	8	\$15.00-22.50	\$18.58	Corp for grain	2010	12	\$25 00-40 00	\$32.25
Tandem acre 8 \$7.50-10.00 \$7.93 Anana seed acre 3 \$35.00-30.00 \$44 Harrow Springtooth acre 1 \$6.00 Beans acre 2 \$40.00 \$40 Boller acre 3 \$6.50-8.00 \$7.17 Sugarbeets \$2.6 \$40.00 \$40 Rotovate hour 2 \$35.00 \$35.00 \$7.17 Sugarbeets \$2.6 \$3.30-4.00	Disk					Alfalfa sood	acre	12	\$29.00-40.00	\$46.00
Harrow Springtooth acre 1 \$6.00 acre 2 \$40.00 \$44 Springtooth acre 1 \$6.00 (swath, windrow) acre 1 \$28 Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets \$20 \$33.30-4.00 \$52 Rotovate hour 2 \$35.00 \$35.00 Top, dig and load ton 3 \$3.30-4.00 \$52 Land plane acre 4 \$8.00-15.00 \$11.38 Haul ton 2 \$2.00 \$2 Corrugating acre 1 \$8.50 Top, dig, load and haul ton 1 \$6 Bedding up acre 2 \$10.00-10.50 \$10.25 Equipment rental Tractors hp/hr² 3 \$0.12-0.15 \$0 Small grains acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$44 Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$44	Tandem	acre	8	\$7.50-10.00	\$7.93	Pogna	acre	3	\$30.00-50.00	\$40.00
Springtooth Roller acre 1 \$6.00 (swath, windrow) acre 1 \$22 Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets \$3.30-4.00 \$5 Rotovate hour 2 \$35.00 \$35.00 Top, dig and load ton 3 \$3.30-4.00 \$5 Land plane acre 4 \$8.00-15.00 \$11.38 Haul ton 2 \$2.00 \$2 Corrugating acre 1 \$8.50 Top, dig, load and haul ton 1 \$6 Bedding up acre 2 \$10.00-10.50 \$10.25 Equipment rental Tractors hp/hr² 3 \$0.12-0.15 \$0 Small grains acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$45 Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$46	Harrow					Deans	acre	2	\$40.00	\$40.00
Roller acre 3 \$6.50-8.00 \$7.17 Sugarbeets Rotovate hour 2 \$35.00 \$35.00 Top, dig and load ton 3 \$3.30-4.00 \$35.00 Land plane acre 4 \$8.00-15.00 \$11.38 Haul ton 2 \$2.00 \$35.00	Springtooth	acre	1		\$6.00	(swath, windrow)	acre	1		\$28.00
Rotovate hour 2 \$35.00 \$35.00 Top, dig and load ton 3 \$3.30-4.00 \$3 Land plane acre 4 \$8.00-15.00 \$11.38 Haul ton 2 \$2.00 \$2 Corrugating acre 1 \$8.50 Top, dig, load and haul ton 1 \$2 Bedding up acre 2 \$10.00-10.50 \$10.25 Equipment rental Tractors hp/hr² 3 \$0.12-0.15 \$0 Small grains acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$45 Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$45	Boller	acre	3	\$6.50-8.00	\$7.17	Sugarbeets				
Land plane acre 4 \$8.00-15.00 \$11.38 Haul ton 2 \$2.00 \$2.00 Corrugating acre 1 \$8.50 Top, dig, load and haul ton 1 \$2.00 \$2.00 Bedding up acre 2 \$10.00-10.50 \$10.25 Top, dig, load and haul ton 1 \$6 Planting and seeding Tractors hp/hr² 3 \$0.12-0.15 \$0 Small grains acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$45 Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$46	Botovate	hour	2	\$35.00	\$35.00	Top, dig and load	ton	3	\$3.30-4.00	\$3.60
Corrugating acre 1 \$8.50 Top, dig, load and haul ton 1 \$6 Bedding up acre 2 \$10.00-10.50 \$10.25 Equipment rental 1 \$6 Planting and seeding Tractors hp/hr² 3 \$0.12-0.15 \$0 Corn acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$45 Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$46	Land plane	acre	Ā	\$8 00-15 00	\$11.38	Haul	ton	2	\$2.00	\$2.00
Bedding up acre 2 \$10.00-10.50 \$10.25 Equipment rental Tractors hp/hr² 3 \$0.12-0.15 \$0 Planting and seeding Small grains acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$45 Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$46	Corrugating	2010	4	0.00-10.00	\$9.50	Top dig load and have	I ton	1		\$6.00
Planting and seeding acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.12-0.15 \$0 Small grains acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$45 Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$45	Bodding up	acro	2	\$10.00.10.50	\$10.00	rop, dig, ioud und nad				40.00
Planting and seeding Tractors hp/hr2 3 \$0.12-0.15 \$0 Small grains acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$45 Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$45	bedding up	acre	2	\$10.00-10.50	\$10.25	Equipment rental				
Small grains acre 3 \$7.00-10.00 \$8.33 Combine (grains) hour 2 \$30.00-60.00 \$45 Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$45 Mathematical control \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$45	Planting and seeding					Tractors	hp/hr2	3	\$0.12-0.15	\$0.13
Corn acre 3 \$7.00-12.00 \$9.67 Combine (alfalfa seed) acre 1 \$48	Small grains	acre	3	\$7.00-10.00	\$8.33	Combine (grains)	hour	2	\$30.00-60.00	\$45.00
	Corn	acre	3	\$7.00-12.00	\$9.67	Combine (alfalfa seed)	acre	1		\$48.00
Allalla/clover acre 0 57.50-10.00 56.00	Alfalfa/clover	acre	6	\$7.50-10.00	\$8.68					

\$9.82

\$0.31 \$0.42 \$8.50 \$11.25 \$3.50 \$7.13 \$25.00

\$10.00 \$7.33 \$10.00

\$27.67 \$40.00 \$32.25 \$46.00 \$40.00 \$28.00

> \$3.60 \$2.00 \$6.00

\$0.13 \$45.00 \$48.00

¹Fencing techniques vary within and among regions. Rates vary with terrain, type of posts used and soil type. ²160 hp \times .14 = \$22.40 per hour. Renter pays operating costs.

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Table 3. Southcentral Idaho custom rates, 1990-91.

Operation	Unit	Respon- dents	Rate range	Average rate	Operation	Unit	Respon
					Imination Johns		
Concrete ditch construct	toot	1		00 12	Growity flow	hour	4
12 Inch	foot	1		\$4.30	Hand lines	hour	4
16 inch	foot	1		\$4.50		noui	-
					Harvesting		
36" netting +					Swath	acre	17
2-strand barbed ¹	foot	2	\$0.27-0.29	\$0.28	Bake	acre	2
Cedar (3 rail)	foot	2	\$1.50-1.75	\$1.63	Bale		
Pole fence	foot	2	\$1.50-1.75	\$1.63	2-string	bale	11
Fertilizer application an	d equip	ment rental			3-string	ton	3
Dry					Hound	bale	8
Broadcast	acre	5	\$5.00-6.50	\$5.60	Square (ton)	bale	5
Air machine	acre	8	\$3.75-9.00	\$5.32	Haul and stack	ton	e
Spreader rental	acre	6	\$0.50-1.00	\$0.87	2-string	bale	18
Aerial (100 lb)	acre	5	\$4.00-6.70	\$5.88	3-string	ton	2
Liquid					o ottinig	bale	5
(Mark out)	2010	2	\$12.50	\$12.50	Round	bale	3
Topdress	acre	2	\$4 00-4 50	\$4.25	Swath, bale and stack	ton	3
	uoro	-	Q1.00 1.00	<i>Q</i> 1.20	Field chop	ton	7
Chemical application					Ag bagging	ton	3
5 gallon	acre	6	\$4 50-5 85	\$5 14	Silage		
5 to 7 gallon	acre	6	\$5.50-7.00	\$6.00	Alfalfa/grass		
> 7 gallon	acre	6	\$6.00-8.00	\$6.75	Chop, haul and pack	ton	4
Ground					Corn		
Tractor	acre	3	\$3.75-7.75	\$5.17	Chop, haul and pack	ton	6
Floater	acre	2	\$4.50-5.00	\$4.75	Cutting	ton	4
In-row	acre	1		\$4.50	Combining (usually inc	ludes sho	ort haul)
Pickup	acre	3	\$5.00-5.65	\$5.38	Small grains	acre	10
Spray coup	acre	4	\$3.00-6.00	\$4.38	Alfalfa sood	acre	2
Sprayer rental	acre	1		\$1.50	Clover seed	acre	3
Manure hauling (up to 5	miles)	0	¢1 00 0 00	01.00	Beans	cwt	1
Spreader truck	ton	2	\$1.80-3.00	\$2.40	Hauling (up to 5 miles)		
Land preparation					Small grains	cwt	6
Moldboard plow		10	C14 00 04 00	\$10.0E	Grain corn	cwt	6
Stubble	acre	10	\$10,00-20,00	\$15.05	Silage	ton	4
Chisel plow	acre	5	\$9.00-12.50	\$10.00	Potatoes		
Disk					Roll vines	acre	2
Tandem	acre	7	\$5.00-12.50	\$9.10	Dig and load	acre	1
Offset	acre	5	\$12.50-20.00	\$15.00		cwt	2
Harrow		-	00 50 5 00	04.00	Haul up to 5 miles	ton	1
Springtooth	acre	3	\$3.50-5.00	\$4.33	Sugarbeets		
Boller	acre	5	\$5 00-10 00	\$6.70	Тор	acre	1
Rotovate	acre	2	\$10.00-12.00	\$11.00	Top, dig and load	ton	3
	hour	1		\$30.00	Truck	ton	3
Land plane	acre	6	\$8.50-12.00	\$10.08	Pasture rental	AUM	2
Planting and seeding					Equipment rental		
Small grains	acre	7	\$7.50-14.00	\$9.93	Tractors		
Corn	acre	4	\$7.00-10.00	\$9.25	New	hp/hr ²	5
Alfalfa/grass	acre	5	\$7.50-12.00	\$10.20	Used	hp/hr	5
Beans	acre	4	\$8.00-12.00	\$10.50	Combine	acre	1
Cultivation					Chisel plow	acre	2
Hand labor					Hotary noe	acre	2
Sugarbeets	0000	0	00 40 00	¢00.07	Milk testing		
Hoeing	acre	3	\$28.00-40.00	\$31.00	Standard fat, protein, So		0
Machine cultivation	0010	0	Q20.00-00.00	WO1.00	Der cow	sample	2
Beans	acre	2	\$10.00	\$10.00	Culture	sample	1
Sugarbeets	adio	-	¢10.00	¢10.00	Antibiotics test	sample	1
Thinning	acre	3	\$30.00-35.00	\$31.67			

Respon-

Rate

range

\$4.25-5.00

\$4.25

\$6.00-12.00

\$4.50-6.00

\$.25-.50

\$10.00-11.50

\$7.50-10.00

\$10.00-15.00

\$5.00-8.50

\$.20-.35

\$7.00

\$.30-.32 \$7.50-8.00

\$22.00-28.00

\$4.00-8.00

\$11.00-12.00

\$7.00-10.00

\$6.50-10.00

\$4.50-8.00

\$24.00-29.00

\$24.00-30.00

\$38.00-45.00

\$38.00-45.00

\$.22-.35

\$.22-.35

\$2.00-5.00

\$10.00-12.00

\$0.38-0.40

\$3.25-4.50

\$2.00-2.50

\$10.00-15.00

\$0.15-0.22

\$0.12-0.13

\$4.50-5.00

\$4.50-10.00

\$1.50-3.00

\$0.48-0.50

Average

rate

\$4.44

\$4.25

\$9.51

\$5.25

\$0.35

\$10.50

\$12.70

\$8.96

\$7.17

\$0.29

\$7.00

\$0.31

\$7.33

\$25.00

\$11.33

\$8.98

\$7.92

\$5.63

\$26.85

\$26.57 \$40.75

\$40.75 \$1.50

\$0.27

\$0.28

\$2.88

\$11.00

\$180.00

\$0.39

\$5.00

\$25.00

\$3.75

\$2.17

\$12.50

\$0.17

\$0.12

\$15.00

\$4.75 \$7.25

\$2.25

\$0.49

\$5.50 \$14.00

\$6.29

1 1 ¹Barbed wire fencing techniques vary within and among regions. Rates vary with terrain, type of posts used and soil type. ²160 hp \times .14 = \$22.40 per hour. Renter pays operating costs.

Table 4. Southeastern Idaho custom rates, 1990-91.

Operation	Unit	Respon- dents	Rate range	Average rate	Operation	Unit	Respon- dents	Rate range	Average rate
Fencing (labor only)		N. Solo			Irrigation labor				
4-strand barbed1	foot	4	\$.50-3.00	\$1.75	Hand lines	pipe	5	\$.1017	\$0.13
Split rail (3 rai!)	foot	3	\$1.35-1.50	\$1.45		line	2	\$1.50-3.25	\$2.38
Pole fence	foot	5	\$1.25-2.50	\$1.70	Wheel lines	line	3	\$2.00-2.50	\$2.33
Fertilizer application a	nd equi	pment rent	al		Gravity flow	hour	5	\$4.35-5.50	\$4.77
Dry Broadcast					Harvesting Hay (alfalfa)				
Spinner	acre	8	\$3.50-4.00	\$3.71	Swath	acre	20	\$8.00-12.00	\$9.72
Barber machine	acre	5	\$3.75-5.00	\$4.52	Rake	acre	4	\$2.50-2.65	\$2.54
Air machine	acre	6	\$4.50-6.00	\$5.08	Bale				
Spreader rental	acre	8	\$1.00-1.50	\$1.26	2-string	bale	10	\$.2535	\$0.30
Aerial (100 lb)	acre	5	\$3.75-4.20	\$3.94	3-string	bale	8	\$.3540	\$0.37
Liquid					Round	bale	7	\$7.50-15.00	\$11.58
Tool bar rental					Square (ton)	bale	4	\$8.00-12.00	\$10.00
(for anhydrous)	acre	3	\$1.50-2.00	\$1.67	Haul and stack				
Shank-in					2-string	bale	9	\$.2330	\$0.27
(w/cultivator)	acre	2	\$8.50	\$8.50	3-string	bale	3	\$.3038	\$0.35
					Round	ton	1		\$2.00
Chemical application					Square ton	ton	2	\$1.50-2.00	\$1.75
Aeriai		E	\$2 E0 E 00	64.40	Swath bale and				
5 gallon	acre	5	\$3.50-5.00	\$4.12	stack	ton	5	\$25 00-35.00	\$27.60
5 to 7 gallon	acre	5	\$4.00-5.50	\$4.70	Field chop	ton	2	\$10.00-12.00	\$11.00
> / gallon	acre	Э	\$4.50-6.00	\$5.17	Aa baaaina	ton	2	\$12.00-15.00	\$13.50
Ground					ng bugging	ton			
Tractor	acre	5	\$2.50-5.00	\$3.31	Silage				
Floater	acre	3	\$4.00-6.00	\$5.33	Alfalfa/grass				
Ріскир	acre	4	\$4.50-5.85	\$5.09	Chop, haul				¢10.00
Spray coup	acre	3	\$3.50-4.50	\$4.17	and pack	ton	1		\$10.00
Sprayer rental	acre	2	\$1.50-2.00	\$1.75	Corn				
Manure hauling	load	3	\$18.00-20.00	\$18.83	Chop, naul	ton	2	\$9.00.10.00	\$9.00
(with truck spreader) (capacity 10 ton)					Combining (usua	ally include	s short hau	\$8.00-10.00	\$9.00
(capacity to tony					Small grains	acre	10	\$16.00-25.00	\$21.55
Land preparation					Beans	cwt	2	\$1.35-1.50	\$1.43
Moldboard plow		0	C10 00 05 00	¢10 70	Heuling (up to F	miles)			
Soc	acre	9	\$10.00-25.00	\$10.78	Frauling (up to 5	miles)	2	\$1 25-1 50	\$1 42
Stubble	acre	9	\$8.00-20.00	\$11.89	Small grains	ton/mile	3	\$1.25-1.50	\$2.00
Dick	acre	3	\$0.50-12.00	\$9.50	Shage	ton			φ2.00
Tandom	acro	3	\$5.00.10.00	68 33	Potatoes				
Offset	acre	3	\$5.50-15.00	\$10.63	Roll vines	acre	4	\$8.00-10.00	\$8.75
Harrow	acre	-	\$5.50-15.00	\$10.05	Dig and load	acre	8	\$120.00-200.00	\$158.33
Spike	9070	3	\$2 50-3 00	\$2.67		cwt	1		\$1.50
Springtooth	acre	4	\$4 50-5 25	\$4 73	Truck	cwt	2	\$0.25	\$0.25
Boller	acre	2	\$5.00	\$5.00	Pasture rental	AUM	3	\$10.00-12.00	\$10.67
Rotovate	hour	1	ψ0.00	\$40.00			1-31-51		
l and plane	hour	3	\$35 00-42 00	\$39.00	Equipment renta	al			
Boto-tilling	hour	2	\$15 00-18 00	\$16.50	Iractors	ha lha?		CO 1E O 00	01 00
noto-timing	noul	-	\$10.00-10.00	\$10.00	New	np/nr²	2	\$0.15-0.20	\$0.18 \$0.15
Planting and seeding					Combine	np/nr	2	QU.15	\$22.00
Small grains	acre	5	\$3.50-12.00	\$7.40	Combine	acre	-		\$55.00
Corn	acre	3	\$8.00-11.00	\$9.67	Dick borrow	nour	1		φ00.00
Alfalfa	acre	5	\$3.00-12.00	\$7.60	Disk narrow	2010	4		\$6.50
w/grain	acre	4	\$3.50-12.00	\$8.38	17 foot	acre	-		\$7.50
Cultivation					Baler	day	1		\$70.00
Field cultivator	acre	2	\$10.00-15.00	\$12.50	Dalei	uay			010.00
Corn	acre	1		\$10.00					

¹Barbed wire fencing techniques vary within and among regions. Rates vary with terrain, type of posts used and soil type. ²160 hp \times .14 = \$22.40 per hour. Renter pays operating costs.

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SERVING THE STATE

Teaching...Research...Extension...this is the three-fold charge of the College of Agriculture at your state Land-Grant Institution, the University of Idaho. To fulfill this charge, the College extends its faculty and resources to all parts of the state.

Extension...The Cooperative Extension System has offices in 42 of Idaho's 44 counties under the leadership of men and women specially trained to work with agriculture, home economics and youth. The educational programs of these College of Agriculture faculty members are supported cooperatively by county, state and federal funding.

Research...Agricultural Research scientists are located at the campus in Moscow, at Research and Extension Centers near Aberdeen, Caldwell, Parma, Tetonia and Twin Falls, and at the U.S. Sheep Experiment Station, Dubois, and the USDA/ARS Soil and Water Laboratory at Kimberly. Their work includes research on every major agricultural program in Idaho and on economic activities that apply to the state as a whole.

Teaching...Centers of College of Agriculture teaching are the University classrooms and laboratories where agriculture students can earn bachelor of science degrees in any of 20 major fields, or work for master's and Ph.D. degrees in their specialties. And beyond these are a variety of workshops and training sessions developed throughout the state for adults and youth by College of Agriculture faculty.