



OPERATION	Oklahoma			West			East			
	No.	Avg.	Median	No.	Avg.	Median	No.	Avg.	Median	
<b>TILLAGE</b>										
Discing - offset	\$/acre	12	10.79	11.50	10	(D)	11.50			
Discing - tandem	\$/acre	11	12.27	13.00	8	(D)	12.50			
Blade or wide sweeps	\$/acre	6	13.17	12.50	6	13.17	12.50			
Spike tooth harrow	\$/acre	5	7.80	8.00	5	7.80	8.00			
<b>FERTILIZER AND CHEMICAL RESULTS</b>										
Applying bulk dry fertilizer	\$/acre	64	6.09	5.50	32	5.60	5.00	32	6.58	6.25
Applying liquid fertilizer	\$/acre	20	5.82	5.90	16	(D)	5.90			
Applying liquid fertilizer, side-dress	\$/acre	8	7.88	6.00	8	7.88	6.00			
Lime application	\$/ton	6	9.92	9.25				5	(D)	
Ground appl - herbicides with boom sprayer	\$/acre	56	6.48	6.00	35	5.82		21	7.58	8.00
Ground appl - herbicides, liquid broadcast or banded	\$/acre	9	12.04		6	(D)	13.93			
Ground appl - herbicides, dry broadcast or banded	\$/acre	5	8.80							
Air application - herbicides	\$/acre	13	10.20		6	12.58	13.50	7	8.16	7.00
Ground appl - fungicides with boom sprayer	\$/acre	10	5.33	5.25	9	(D)	5.00			
Air application - fungicides	\$/acre	8	7.53	7.50	7	(D)	7.50			
Ground appl - insecticides with boom sprayer	\$/acre	6	5.63	6.00	5	(D)	6.00			
Air application - insecticides	\$/acre	8	6.69	6.88	6	(D)	6.88			
Ground application - desiccants	\$/acre	6	5.75	5.00						
Air application - desiccants	\$/acre	6	6.00	6.00						
Air application - growth regulators	\$/acre	6	6.21	6.50						
<b>PLANTING</b>										
Air Seeder - conventional tillage, small grains w/o fertilizer	\$/acre	5	16.60		5	16.60				
Drill small grains - conventional tillage	\$/acre	10	12.55	12.25	10	12.55	12.25			
Drill small grains - no-till	\$/acre	17	(D)	16.00	14	(D)	16.00			
<b>HAYING</b>										
Mowing hay	\$/acre	27	16.19	16.00	22	16.59	16.00	5	14.40	15.00
Raking hay	\$/acre	27	4.22	4.00	23	(D)	4.00			
Swathing	\$/acre	116	16.09	16.00	111	16.11	16.00	5	15.60	
Small square bales										
Baling a small square bale	\$/bale	20	2.05	2.00				16	(D)	2.05
Cost of all haying operations (cutting to stacking sm squares)	\$/bale	10	2.22	2.00				8	(D)	2.00
Flat rate for hauling small square bale, other trailer	\$/bale	8	1.05	1.10				7	(D)	1.10
Large square bales										
Baling a large square bale, 4-foot width	\$/bale	8	17.58	18.00	5	(D)				
Flat rate for hauling large square bale, other trailer	\$/bale	5	4.55	5.00				5	4.55	5.00
Large round bales										
Baling a round bale, 4-foot width	\$/bale	22	14.67	15.00	9	15.44	15.00	13	14.13	15.00
Cutting, raking, baling round bales, 4-foot width	\$/bale	166	22.56	22.00	14	22.71	23.50	152	22.54	22.00
Flat rate for hauling round 4-foot width bales, other trailer	\$/bale	18	5.13	5.00				17	(D)	5.00
Baling a round bale, 5-foot width	\$/bale	123	16.16	16.00	113	16.19	16.00	10	15.90	15.50
Cutting, raking, baling round bales, 5-foot width	\$/bale	175	25.55	25.00	60	26.85	26.00	115	24.87	25.00
Flat rate for hauling round 5-foot width bales, semi-trailer	\$/bale	7	4.93	5.00						
Flat rate for hauling round 5-foot width bales, other trailer	\$/bale	12	5.50	5.00	7	5.57	5.00	5	5.40	5.00

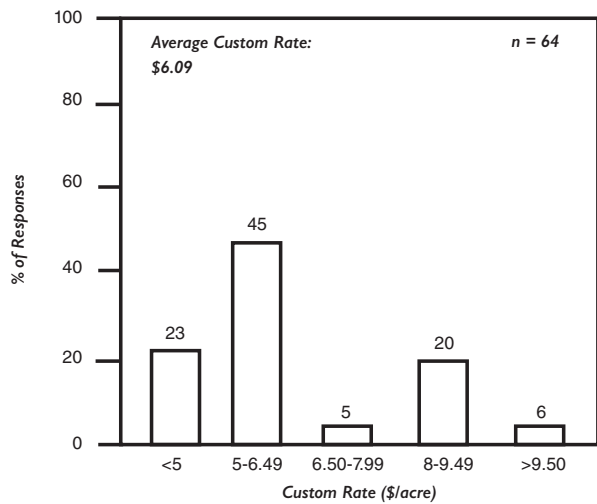
OPERATION	Oklahoma			West			East		
	No.	Avg.	Median	No.	Avg.	Median	No.	Avg.	Median
<b>SMALL GRAIN HARVEST</b>									
Combining wheat & sm. grains (flat rate) \$/acre	61	23.89	24.00	58	(D)	24.00			
Base rate for combining small grains \$/acre	38	23.61	24.00	38	23.61	24.00			
extra charge per bushel \$/bu.	38	0.24	0.24	38	0.24	0.24			
for excess over XX bushels/acre bu.	38	21.68	20.00	38	21.68	20.00			
Flat rate for hauling small grains \$/bu.	28	0.24	0.24	27	(D)	0.24			
Combining soybeans (flat rate) \$/acre	9	27.11	25.00	8	(D)	25.00			
<b>LIVESTOCK OPERATIONS</b>									
Artificial insemination, cattle \$/head	11	12.09	10.00				7	(D)	12.50
Branding cattle \$/day	10	115.40	122.00	5	141.00	150.00	5	89.80	
Branding cattle \$/head	13	4.65					9	(D)	5.00
Castrating cattle \$/day	5	87.80							
Castrating cattle \$/head	20	5.28	5.00	9	3.78		11	6.50	6.00
Chute fee, cattle \$/head	17	3.89	4.00	10	3.80	3.50	7	4.03	5.00
Custom feeding - calving out cows \$/hd/day	6	1.44	1.13				5	(D)	1.00
Custom feeding - weaned calves \$/hd/day	11	2.37		5	2.63		6	2.15	1.50
Custom feeding - wintering pregnant beef cows \$/hd/day	7	1.68							
Dehorning cattle \$/head	7	12.64	10.00				7	12.64	10.00
Pregnancy test cattle \$/head	27	4.78		12	4.50	4.00	15	5.00	5.00
Processing cattle \$/day	6	129.83	137.50						
Processing cattle \$/head	14	14.39	17.25	7	14.39		7	14.39	
Spraying cattle \$/head	5	2.40	2.00				5	2.40	2.00
Worming cattle \$/head	20	4.43	3.00	7	4.26	3.00	13	4.52	3.00
Hauling cattle belly semi truck \$/day	6	550.00	475.00						
Hauling cattle belly semi truck \$/mile	21	3.92	4.00	13	4.00	4.00	8	3.79	3.90
Hauling cattle trailer \$/day	13	246.15	250.00				11	(D)	150.00
Hauling cattle trailer \$/mile	11	2.49					8	(D)	2.30
Hauling other livestock gooseneck \$/mile	5	2.12					5	2.12	
<b>MISCELLANEOUS</b>									
Brush hogging \$/hour	29	55.24	60.00	7	62.86		22	52.82	55.00
Clearing cedar trees \$/hour	21	92.24	85.00				17	(D)	85.00
Dozing (D6 or smaller) \$/hour	43	107.44	100.00	15	111.33	100.00	28	105.36	100.00
Dozing (D7 or larger) \$/hour	17	143.18	150.00	7	139.57		10	145.70	145.00
Sawing wood, chainsaw \$/hour	10	31.20	35.00				9	(D)	
Welding \$/hour	28	54.46	50.00	10	50.00	45.00	18	56.94	50.00
Building new fence w/materials (4-6 wire, steel posts) \$/mile	14	15005	14816	7	16060		7	13950	
Building new fence w/o materials (4-6 wire, steel posts) \$/hour	16	26.33	22.00				12	(D)	18.50
Building new fence w/o materials (4-6 wire, steel posts) \$/mile	30	4875	5240	15	4757		15	4994	
Fence maintenance - inspection and minor repair \$/hour	17	19.12	20.00				13	(D)	20.00
Fence removal \$/hour	8	47.63	27.50						

(D) Regional average withheld due to disclosure.

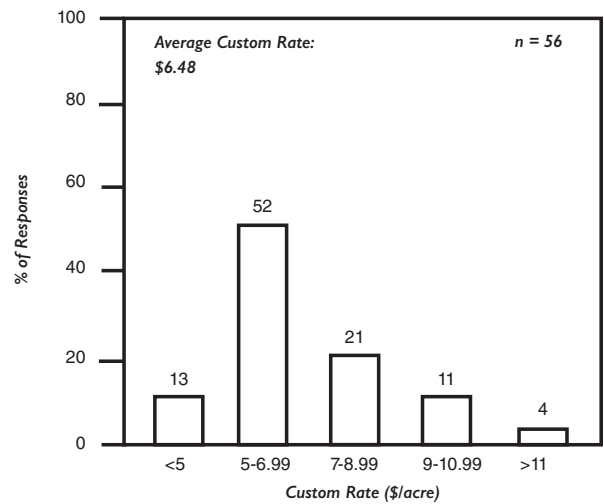
Median values representing an individual reports are withheld.

Figure 2. Relative frequency of responses for selected operations, 2021-2022

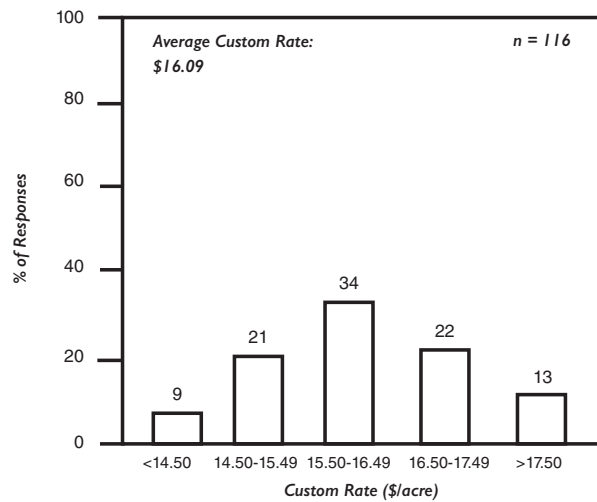
**Applying dry bulk fertilizer**



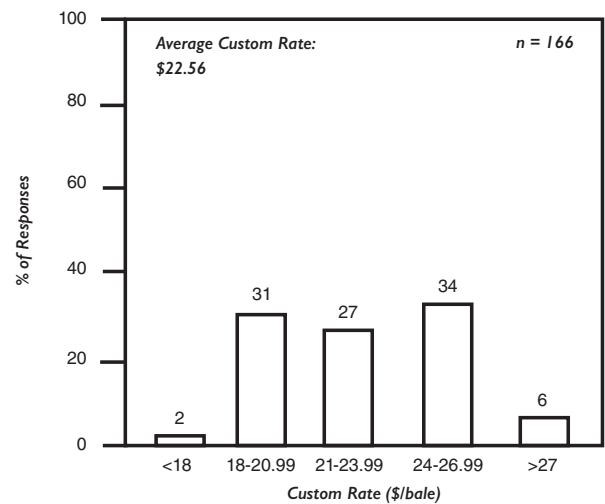
**Herbicide application with boom sprayer**



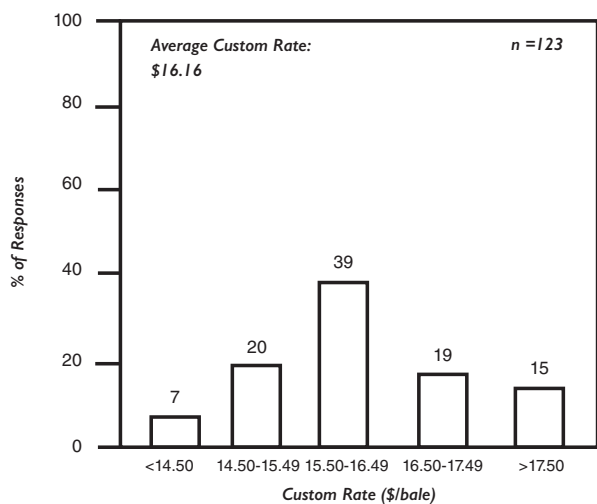
**Swathing**



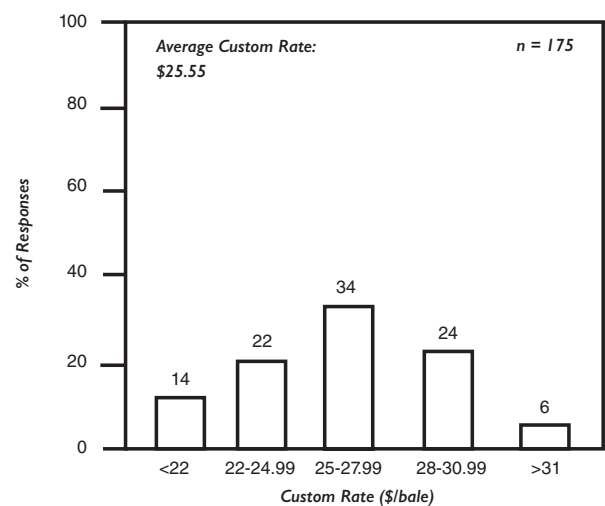
**Cutting, raking, baling round bales, 4-foot width**



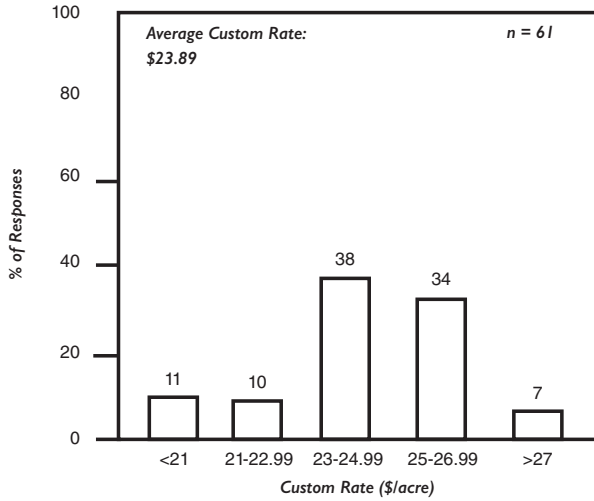
**Baling round bales, 5-foot width**



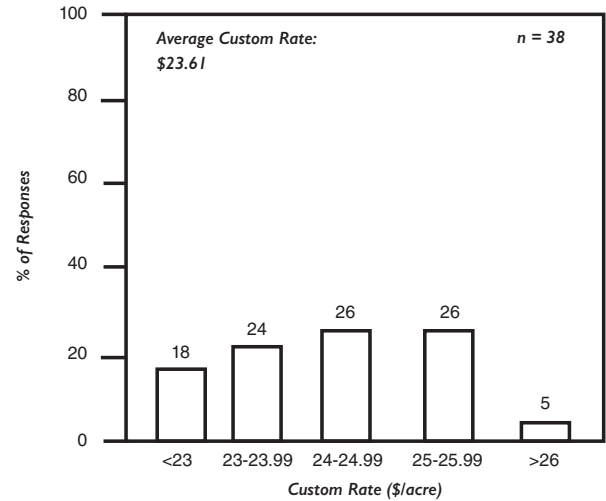
**Cutting, raking, baling round bales, 5-foot width**



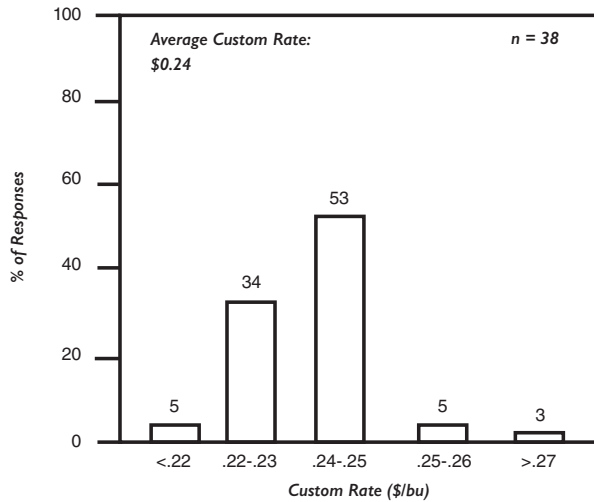
**Combining wheat & small grains (flat rate)**



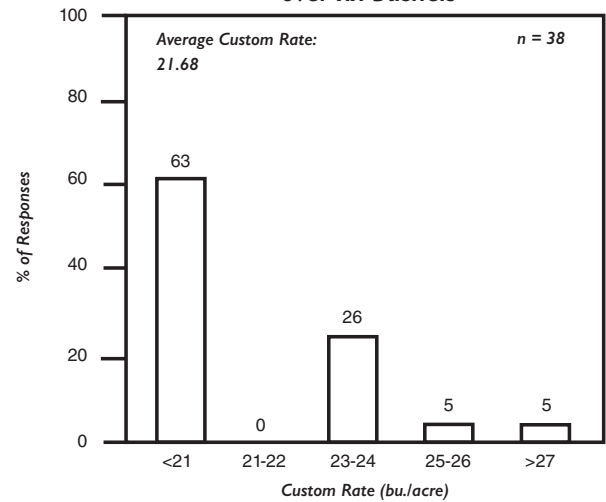
**Combining wheat & small grains (base rate)**



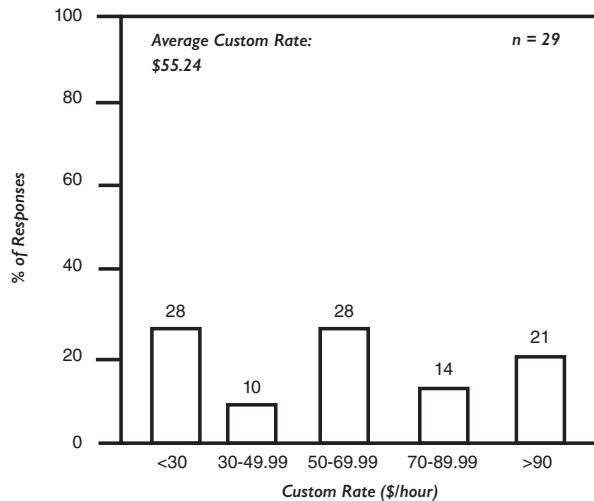
**Combining small grains additional charge**



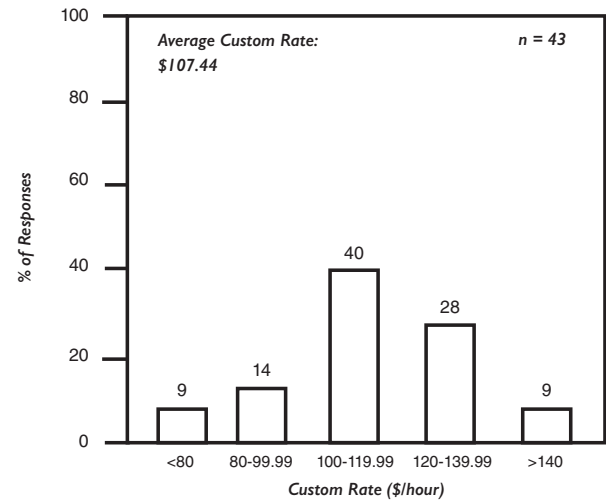
**Combining small grains for excess over xx bushels**

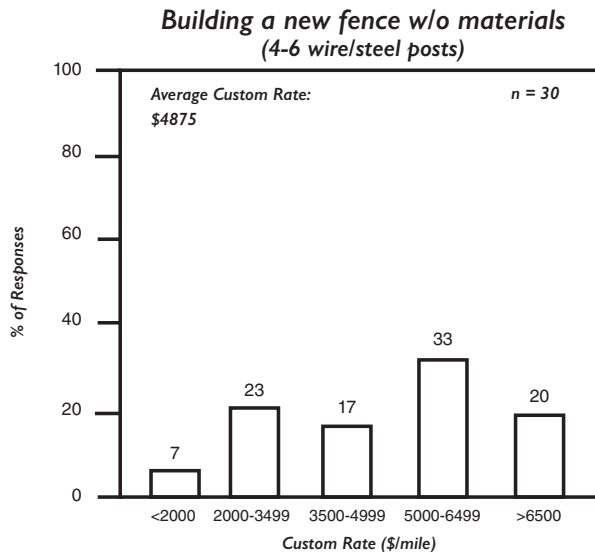


**Brushhogging**



**Dozer (D6 or smaller)**





### Reporting Regions

Area rates are summarized for the State of Oklahoma as shown in Figure 1. Regional differences are apparent in the rate table with higher rates prevailing when:

- Fields are small.
- Soils are heavy.
- Slopes are steep.
- Machines are scarce.
- Custom operators are not available.

Rates tend to be lower than expected when exchange work is common between relatives and neighbors. Under these circumstances, fixed costs of ownership such as depreciation and interest on investment (sometimes even labor) tend to be discounted when a rate is established for a particular job.

### Custom Service vs. Ownership

Individual circumstances—cash flow, ownership and operating costs, labor availability, reliability and timeliness of custom operators, pride of ownership—will influence an individual's decision on whether to buy or lease machinery and equipment or custom hire work done. A worksheet at the end of this article is designed to help evaluate the cost of machinery ownership and operation.

### Possible Advantages of Using Custom

#### Operations

- Ownership costs are avoided.
- Capital and labor can be channeled to other uses.
- Machine use can be readily adjusted to changes in crop mix and market conditions.

- Specialized operations may benefit from an experienced and skilled operator.
- Jobs may be completed faster using several machines.

### Possible Disadvantages of Using Custom Operations

- Service may not be available during the ideal time.
- Reliability of the custom operator may not be known.
- Rates may be excessive during the optimal time.

Each manager must choose the best combination of owned and hired machines. The quotations here will be helpful in estimating custom costs and to provide a base figure for agreement on a rate when well established local rates are not available. If you have questions, ask your Extension Educator- Agriculture or Area Agricultural Economics Specialist for additional information.

### Considerations to Keep in Mind

Be aware that there is a wide variation in rates charged for most jobs, even within the same geographic area, partly because some custom work is done for friends, relatives, and neighbors at reduced rates, partly because some custom work is done late by farmers who do their own work first and therefore do not attempt to include the full cost of machine ownership in their rates, and partly because it is easy to underestimate the full cost of ownership and operation of machinery.

A small number of reports for a given custom rate in a particular area may not be representative. In this case, it is particularly important to check rates in other areas or state-wide where a larger number of reports are found.

## Costs of Ownership and Operation

The management decision to own a machine, to custom hire operations performed, or to custom perform operations is partially determined by cost, which is heavily influenced by the amount of use realized over the period of machine ownership. Estimates of fixed and variable costs per hour can be approximated using the following steps. Unless accurate records are used to estimate costs, variability in machine and operator efficiencies can cause actual results to be significantly different from estimated results.

A. Acres per hour = Acres covered in normal day ÷ hours in normal day = \_\_\_\_\_ acres ÷ \_\_\_\_\_ hours = \_\_\_\_\_

B. Average investment = (Original cost + Trade-in value) ÷ 2 = (\$ \_\_\_\_\_ + \$ \_\_\_\_\_) ÷ 2 = \$ \_\_\_\_\_

C. Depreciation =  $\frac{\text{Annual Original cost - Trade-in value}}{\text{Number of years owned}}$  = (\$ \_\_\_\_\_ - \$ \_\_\_\_\_) ÷ \_\_\_\_\_ years = \$ \_\_\_\_\_

D. Interest =  $\frac{\text{Annual Average Investment} \times \text{Interest rate}}{100}$  = \$ \_\_\_\_\_ x \_\_\_\_\_ % = \$ \_\_\_\_\_

E. Taxes =  $\frac{\text{Annual Average Investment} \times \text{Personal Tax rate (1)}}{100}$  = \$ \_\_\_\_\_ x \_\_\_\_\_ % = \$ \_\_\_\_\_

F. Insurance =  $\frac{\text{Annual Average Investment} \times \text{Insurance rate (2)}}{100}$  = \$ \_\_\_\_\_ x \_\_\_\_\_ % = \$ \_\_\_\_\_

G. Total Annual Ownership Costs (Sum of C through F) = \$ \_\_\_\_\_

H. Costs per acre =  $\frac{\text{Ownership Annual Costs}}{\text{Acres Per Year}}$  = \$ \_\_\_\_\_ ÷ \_\_\_\_\_ acres/year = \$ \_\_\_\_\_

I. Per acre =  $\frac{\text{Repairs Acres}}{\text{Per Year}}$  = \$ \_\_\_\_\_ ÷ \_\_\_\_\_ acres/year = \$ \_\_\_\_\_

J. Per acre =  $\frac{\text{Fuel Cost Fuel Gallons}}{\text{Price Per Hour} \times \text{Per Hour}} \div \text{Per Hour}$  = (\$ \_\_\_\_\_/gal. x \_\_\_\_\_ gal./hour) ÷ \_\_\_\_\_ acres/hour = \$ \_\_\_\_\_

K. Per acre =  $\frac{\text{Labor costs Daily}}{\text{Wage Per day}}$  = \$ \_\_\_\_\_/day ÷ \_\_\_\_\_ acres/day = \$ \_\_\_\_\_

L. Total Cost Per Acre = Sum of items H through K above = \$ \_\_\_\_\_

- (1) Use local tax rate if known. One to two percent is a reasonable "guesstimate".  
 (2) Use own insurance rate if known. One-half to one percent is a reasonable "guesstimate".  
 (3) Use your repair expense data, if available. One percent of original price for each year machine is kept is a rough estimate; e.g., 10% per year if machine is to be used for 10 years.

## ***The Oklahoma Cooperative Extension Service Bringing the University to You!***

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

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