

# SAMPLE COSTS

FOR IRRIGATED PERMANENT PASTURE

IN MADERA COUNTY

1970

This sheet is for use as a guide in determining irrigated permanent pasture inputs and costs for a specific set of conditions. It is designed to help growers analyze their practices with a view towards increasing efficiency of production. Along with similar sheets on other crops, it also can be used as a basis for making cost comparisons with most profitable alternatives. The figures in the tables are not intended to represent average costs for irrigated permanent pasture in Madera County. A large proportion of these pastures are planted on land not well adapted to other crops and costs may vary widely between individual situations.

The amount of feed obtained from a pasture is influenced greatly by grazing practices. Also, all types of stock do not utilize pasture to the same degree of efficiency. Milking cows may use only 3/4 of the available feed that growing stock might use. Also, sufficient stock must be on hand to fully utilize feed produced. Therefore, in determining the amount of feed which may be obtained from a pasture, one should consider whether it will be used to maximum capacity.

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	COST PER ACRE	
	Sample Cost	Your Cost
<b>CASH COSTS:</b>		
Land preparation, seed, plant, and extra 1st year costs $\$26.60 \div 10$ years	\$ 2.66	
Mow, fertilize, drag, fence work, etc.: 3 man and $1\frac{1}{2}$ tractor hours	6.75	
Irrigation labor: 2 man hours	3.50	
Irrigation water: power and district tax	15.00	
Fertilizer: average per year	15.00	
Miscellaneous materials	1.50	
County taxes	8.00	
Office, car, operating capital, etc.	3.25	
Repairs except tractor: irrigation system and equipment	2.50	
<b>TOTAL CASH COSTS</b>	<b>\$58.16</b>	
<b>DEPRECIATION:</b>		
Irrigation system: original cost \$100	6.00	
Tractor: 2 $1/8$ hours incl. $1/10$ 1st year hours @ 60¢	1.15	
Other equipment: cost \$20 - 10 year life	2.00	
Fences: cost \$20 - 20 year life (\$1,000 per mile of electric cross fencing)	1.00	
<b>TOTAL DEPRECIATION</b>	<b>10.15</b>	
<b>TOTAL CASH AND DEPRECIATION COST</b>	<b>68.31</b>	
<b>INTEREST ON INVESTMENT @ 8%</b>		
Land @ \$500.00	40.00	
Irrigation system: on $1/2$ cost (\$50)	4.00	
Tractor: 2 $1/8$ hours incl. $1/10$ 1st year hours @ 33¢	.60	
Other equipment: on $1/2$ cost (\$10)	.80	
Fences: on $1/2$ cost (\$10)	.80	
<b>TOTAL INTEREST ON INVESTMENT</b>	<b>\$46.20</b>	
<b>TOTAL COST OF PRODUCTION</b>	<b>\$114.51</b>	

Man labor at \$1.75 per hour, including Social Security and Compensation Insurance; tractor per hour cash cost \$1.00 and \$1.25, depreciation 60 cents, interest 33 cents.

COST PER ANIMAL UNIT MONTH\* AT VARYING PRODUCTION LEVELS<sup>1</sup>

Production level - AUM per acre	6	8	10	12	14	16
Cash and depreciation cost	\$11.39	\$ 8.54	\$ 6.83	\$ 5.69	\$ 4.88	\$ 4.27
Total cost per AUM	19.09	14.31	11.45	9.54	8.18	7.16
Your total cost						

\*Animal Unit Month (AUM) = 400 pounds total digestible nutrients (TDN) or 0.4 tons hay.

<sup>1</sup>With no change in costs per acre. Any added costs per acre required to obtain the higher carrying capacities would increase AUM costs accordingly.

LAND PREPARATION, PLANTING AND ADDITIONAL FIRST-YEAR  
SAMPLE COSTS TO ESTABLISH AN IRRIGATED PERMANENT PASTURE

	COST PER ACRE	
	Sample Cost	Your Cost
CASH COSTS:		
Land preparation: disc, level, chisel, border work, etc.--2½ man & 2¼ tractor hours	\$ 7.32	
Plant: ½ hour man and tractor	1.38	
Seed: 20 lbs. Total at average of 50¢/lb.	10.00	
Extra irrigations: 2 man hours	3.50	
Extra clippings (2): ½ hr. man and tractor	1.38	
TOTAL CASH COSTS	\$23.58	
DEPRECIATION ON TRACTOR: 3¼ hrs. @ 60¢	1.95	
INTEREST ON TRACTOR: 3¼ hrs. @ 33¢	1.07	
TOTAL EXTRA FIRST-YEAR ESTABLISHMENT COSTS	26.60	

One-tenth of the above costs are included in the other table.

MEASUREMENT OF FEED OBTAINED FROM PASTURE

To compare the cost of feed from pasture with alternative forages, it is necessary to know how much other feed is replaced by the pasture. An animal unit month (AUM) may be used as a unit of measurement. It is equivalent to 400 pounds of total digestible nutrients, or 13.3 pounds of TDN per day for a month. Feed requirements for animals on pasture can be converted to this basis.

Animal unit conversion factors for different kinds, ages and sizes of animals may be obtained from farm advisors. Animal unit months can be converted to approximate tons of hay equivalent, since hay is roughly figured at 50% TDN or 1,000 pounds per ton. Therefore, 1 AUM = 0.4 tons of hay, or 2.5 AUM = 1 ton of hay.