

Investment and Annual Overhead Costs

	<u>Sample Cost</u>	<u>Yours</u>
Swather 14 ft. S.P. - New cost \$12,000 + tax \$600	\$12,600	
	<u>Annual Cost</u>	
Depreciation: \$12,600 less 10% salvage \$1260 = \$11,340; 5 yrs. life or 4,000 hours	\$ 2,268	
Interest @ 7% on average value \$12,600 + \$1,260 ÷ 2 = \$6,930	485	
Taxes, ins., etc. @ 2% of new cost ex. tax	240	
Total Annual Overhead	<u>\$ 2,993</u>	

Overhead Cost Per Hour at Varying Hours Per Year

Hours per year	200	400	600	800 and over
Cost per hour	\$14.97*	\$7.48*	\$4.99	\$3.74

* Cost would be reduced if life were extended due to low annual use.

Cash Operating and Total Cost Per Hour

	<u>Sample Cost</u>	<u>Yours</u>
Labor at \$2.20/hr.	\$2.20	
Fuel	.40	
Repairs, oil and maintenance @ 2% of new cost ex. tax + 100 hrs.	2.40	
Total Cash Cost Per Hour	<u>\$5.00</u>	
Overhead Cost Per Hour with Maximum Use	3.74	
Total Cost Per Hour	<u>\$8.74</u>	

Swathing Cost Per Acre and Per Green Ton at Varying Acres Per Hour

Acres swathed per hour	3	4	5	6
Swathing cost per acre	\$2.91	\$2.19	\$1.75	\$1.46
Cost per green ton @ 4T/A	\$.73	\$.55	\$.44	\$.37

Explanation

The sample costs shown in these tables are based on a fairly sizeable and efficient operation. It is assumed that in order to justify such expensive equipment it would probably also be used in connection with other forage crops harvested and fed on a dairy. The method of swathing and wilting to guard against bloat before chopping and feeding is common practice on many dairies. However, quite a few dairymen chop direct from the standing alfalfa without serious problems. This method usually requires more chopping time and the total cost per ton is not much different than where an efficient swathing-chopping combination is involved. The kind, size and cost of equipment used by different dairymen varies considerably, depending on individual situations such as herd size, quantity fed and distance to the field.

Prepared by Farm Advisors, Gale G. Gurtle - Tulare County, Herbert S. Etchegaray - Kings County, Winston L. Engvall - Kern County and Extension Economist Burt B. Burlingame.

University of California Farm and Home Advisor's Office, 2610 "M" Street, Bakersfield, California, May 1971.

SAMPLE COSTS TO CHOP AND FEED GREEN ALFALFA
IN TULARE, KINGS, AND KERN COUNTIES - 1971

Cost Analysis Work Sheet

Investment Excluding Swathing

	Sample New Cost	Yours
Tractor: WD 75-85 dbhp (also used for other work)	\$12,000	
Pickup Chopper - PTO (also may be used for other forage)	4,200	
Feed Wagon - PTO (also may be used for other forage)	5,000	

Investment Overhead Excluding Swathing

	Depreciation		Interest @ 7% on av. value	
	Sample Cost	Yours	Sample Cost	Yours
Tractor - 1,000 hrs/yr	\$1.08/hr.-22¢/T		46¢/hr-9¢/T	
Chopper - 5 yrs @ 3600T/yr	\$756/yr.-21¢/T		\$162/yr-4¢/T	
Feed Wagon - 10 yrs @ 3600T/yr	\$450/yr.-13¢/T		\$193/yr-5¢/T	
Total	\$.56/T		\$.18/T	

Cash Operating and Total Cost Per Green Ton

	Sample Cost	Yours
<u>Costs excluding swathing:</u>		
Labor @ \$2.20/hr: 1 hr. to chop from windrow, haul up to 1 mi. and feed 5 T.	\$.44	
Tractor fuel - av. 4 gal/hr. @ 16¢	\$.64/hr	
Tractor repairs, oil & lube	1.20/hr	
Tractor taxes, ins., etc.	.24/hr	
Tractor cash costs	\$2.08/hr	.42
Chopper: repairs 6¢/ton; taxes, ins., etc. 2¢/T	.08	
Feed Wagon: repairs 7¢/ton; taxes, ins., etc. 3¢/T	.10	
Cash costs excluding swathing	\$1.04	
Depreciation	.56	
Interest	.18	
Total Costs Excluding Swathing	\$1.78	
Swathing cost at 5 acres per hour (See other table)	\$.44	
Total Cost Including Swathing	\$2.22	

COMPARING GREEN CHOPPED WITH BALED HAY

Green chopping not only replaces the hay harvesting operation but also the hauling and feeding. Therefore, in comparing costs between the two methods, adjust the hay to a fed basis. The ratio of green chopped to hay is commonly figured at 4 to 1 before allowance for wilting in a windrow. This is the dry matter ratio when moisture in the green alfalfa is 77½ per cent and 10 per cent in the hay. However, moisture content of both can vary considerably. Wilting before chopping and feeding will reduce the ratio. In figuring specific cost and value relationships, the actual ratio should be determined.

If the ratio were 4 to 1 and green chopping costs were \$2.22 per ton, this would be equivalent to baled hay with a harvesting, delivery, and feeding cost of \$8.88 per ton, assuming the "standing cost" of the alfalfa to be the same for both methods. Additional yield per acre may sometimes be obtained with green chopping, due to one or more extra cuttings which would tend to reduce costs per ton.