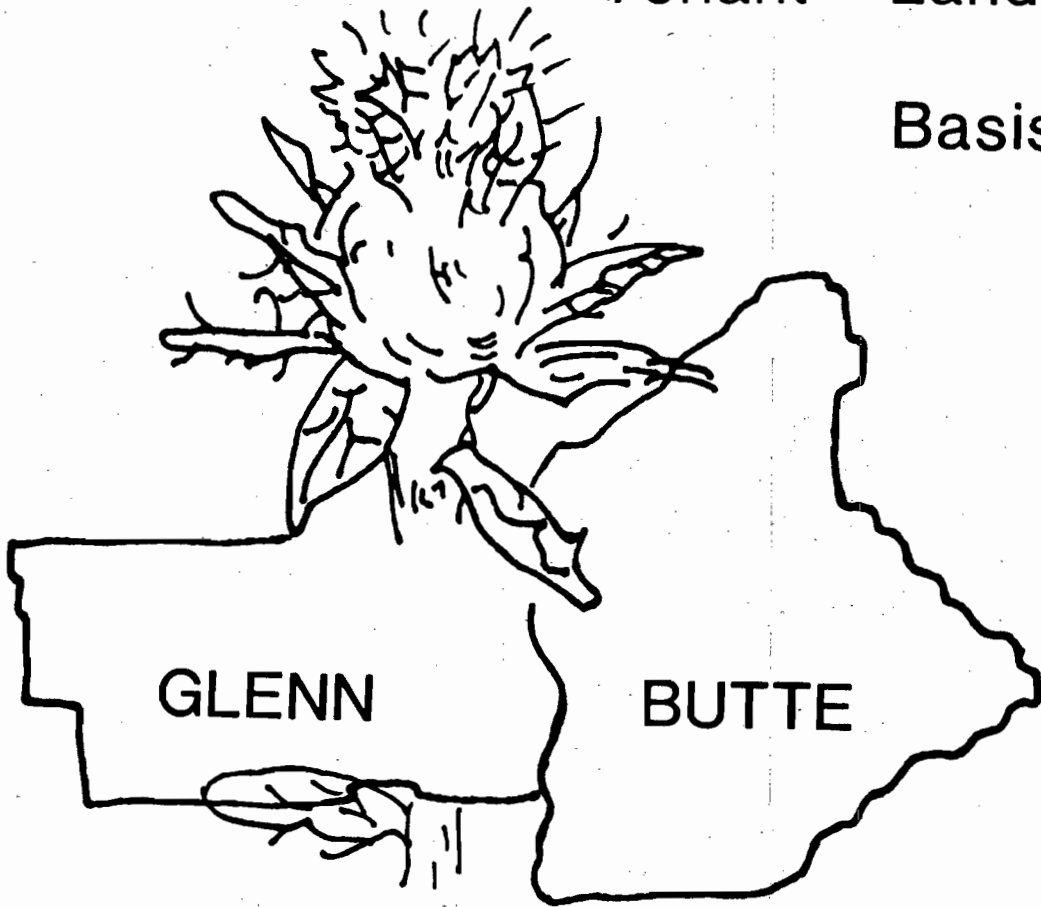


SAFFLOWER PRODUCTION COSTS

Tenant Landowner
Basis



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ASSUMPTIONS FOR SAFFLOWER COST STUDY

1. These sample costs to produce safflower in the two counties designated may not represent the cost of any one individual grower. However, this cost study should serve as a useful guide in reviewing the typical costs and practices in safflower production. Growers are encouraged to make use of the column "Your Costs" provided to permit a comparison of the sample costs in this study with individual grower costs.
2. This cost study is based on a 1,500 acre field crop operation with 100 acres of safflower. Other crops grown could include some of the following crops: grain crops, alfalfa hay, legume seed, sunflower seed, sugarbeets, field corn, beans, rice, etc.
3. **Equipment Costs:**

Equipment depreciation and interest costs are apportioned on a per acre basis—with the costs being assigned to each crop for which a piece of equipment is used in proportion to the crop's acreage.

In allocating the equipment costs per acre the following calculations were made: (a) "Original Cost" of equipment is the new cost including sales tax. (b) "Depreciation" is straight line with no adjustment for Salvage Value. It is calculated by dividing the new cost per acre by the years of life. (c) "Interest" on investment is figured at one-half of the new cost per acre multiplied by the interest rate of 12%. One-half of the new cost is the average value of the equipment during its useful life. (d) The investment per acre used in the cost study is calculated at 60% of the depreciation and interest costs for all new equipment to reflect a mix of new and used equipment.
4. **Fuel and Repair Costs:**

The cost of production worksheets contain numbers in two columns with the headings Tractor/Implement No. and Implement No. which refer to the item number on the equipment table which shows the fuel and repair costs per hour multiplied by the hours used per acre for each piece of equipment to obtain the cost per acre for fuel and repairs.
5. Office and business costs include phone, office supplied, legal and accounting fees, etc.
6. County taxes are calculated at 1% of the average assessed value of equipment, buildings and improvements.
7. Equipment insurance is calculated at 0.8% of the average value of the equipment.
8. Pickup costs are based on 25,000 per year for one pickup and 15,000 miles per year for a second pickup at \$0.15 per mile.
9. Labor costs are based on a \$8.50 hourly rate for skilled labor. Included are cash wages, compensation insurance, Social Security, unemployment insurance and other benefits that the employer might pay.
10. Twelve percent interest on operating moneys is extended over a nine month period.
11. Every operation of every grower in Glenn and Butte Counties is not necessarily the same. Therefore, the cost study is an effort to provide a basis rather than an absolute program of the cost of growing safflower.
12. Growers from Glenn and Butte Counties participated in furnishing information for compiling the basic information for this study. Appreciation is expressed to these growers and to others who provided information.

SAMPLE COSTS TO PRODUCE SAFFLOWER
Glenn-Butte Counties - 1989

Labor Rate: \$8.50/hr. skilled labor

Interest Rate: 12%
Yield (lbs/acre): 1,750

Operation	Tractor/ Implement No.	Implement No.	Hours	Cash and Labor Costs per Acre					Total Cost	Your Cost
				Labor Cost/A	Fuel & Repairs	Material Cost	Custom /Rent			
CULTURAL COSTS:										
Chisel	1	5	.20	\$1.87	\$4.10				\$5.97	
Springtooth	1	6	.10	.94	2.15				3.08	
Disk/fertilize (100 lbs. N)	2	4	.12	1.12	3.32	\$20.00	\$2.00		26.44	
Disk/apply herbicide 2X	2	4	.40	3.74	11.06	6.05	1.50		22.35	
Drill, 25 lbs. seed @ \$0.46	3	7	.25	2.34	4.12	11.50	1.50		19.46	
75 lbs. N-P starter fert.						9.38			9.38	
Chop stubble (post harvest)	3	10	.25	2.34	4.31				6.65	
Charges for pick-up use					4.00				4.00	
Interest on operating capital @ 12%									7.90	
TOTAL CULTURAL COSTS			1.32	\$12.34	\$33.06	\$46.93	\$5.00		\$105.23	
HARVEST COSTS:										
Combine		9	.40	3.74	15.33				19.07	
TOTAL HARVEST COSTS*			.40	\$3.74	\$15.33				\$19.07	
CASH OVERHEAD:										
Office and business costs									\$15.00	
Land rent: 25% share of	1750 lbs @ \$250/ton								54.69	
Building & Equipment Taxes									1.42	
Equipment Insurance									1.14	
TOTAL CASH OVERHEAD COSTS									\$72.25	
TOTAL CASH COSTS									\$196.55	
TOTAL CASH COST PER CWT @ 1750 lbs/acre									\$11.23	
INVESTMENT:										
	Per Acre			Annual Cost						
				Depreciation	Interest @ 12%					
Equipment & buildings	284.70			25.10	17.08				42.18	
TOTAL INVESTMENT COSTS				\$25.10	\$17.08				\$42.18	
TOTAL COSTS PER ACRE									\$238.73	
TOTAL COST PER CWT @ 1750 lbs/acre									\$13.64	

* Roadside into semi-trucks. Hauling costs paid by contracting company.

**MONTHLY SUMMARY OF
SAMPLE COSTS TO PRODUCE SAFFLOWER**

Glenn-Butte Counties - 1989

Operation	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOTAL
CULTURAL COSTS:													
Chisel	6.0												6
Springtooth				3.1									3
Disk/fertilize					26.4								26
Disk/apply herbicide					22.4								22
Drill, 25 lbs. seed						19.5							19
75 lbs. N-P starter						9.4							9
Chop stubble-post har											6.7		7
Charges for pick-up	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	4
Int.operating capital		.1	.1	.1	.6	.9	.9	.9	.9	.9	1.2	1.2	8
TOTAL CULTURAL COSTS	\$6	\$0	\$0	\$4	\$50	\$30	\$1	\$1	\$1	\$1	\$8	\$2	\$105
HARVEST COSTS:													
Combine											19.1		19
TOTAL HARVEST COSTS											\$19		\$19
CASH OVERHEAD:													
Office and business	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	15
Land rent - 25%											55		55
Bldg./equip. taxes				.7								.7	1
Equipment Insurance	1.1												1
TOTAL CASH OVERHEAD	\$2	\$1	\$1	\$2	\$1	\$1	\$1	\$1	\$1	\$1	\$56	\$2	\$72
TOTAL CASH COSTS	\$9	\$2	\$2	\$5	\$51	\$31	\$2	\$3	\$3	\$3	\$83	\$4	\$197

EQUIPMENT AND BUILDING LIST FOR SAFFLOWER
Glenn-Butte Counties - 1989

Interest Rate: 12%

Fuel Cost per Gallon \$.65 diesel
\$.85 gasoline

ITEM #	DESCRIPTION	NEW COST	ANNUAL USE (ACRES)	COST PER ACRE	LIFE (HRS)	YEARS TO TRADE	OVERHEAD*		TAR*	HOURLY COSTS		
							DEPRECIATION	INTEREST*		FUEL*	REPAIRS*	TOTAL
Tractors:												
1	Crawler-125 HP	\$125,000	1500	\$83.33	12,000	15	\$5.6	\$5.00	100%	\$6.26	\$10.42	\$16.67
2	4WD Wheel-200 HP	90,000	1500	60.00	12,000	10	6.00	3.60	120	10.01	9.00	19.01
3	2WD Wheel-125	65,000	1500	43.33	12,000	10	4.33	2.60	120	6.26	6.50	12.76
4	Offset disc-21'	18,000	1500	12.00	2,500	10	1.20	.72	120		8.64	8.64
5	Chisel (heavy duty)-16'	8,000	1500	5.33	2,500	10	.53	.32	120		3.84	3.84
6	Field cultivator-32'	10,000	1500	6.67	2,500	15	.44	.40	120		4.80	4.80
7	Drill-13'(w/fert.attach.)	7,750	600	12.92	2,500	10	1.29	.78	120		3.72	3.72
8	Tool carrier	10,000	1500	6.67	1,000	10	.67	.40	40		4.00	4.00
9	SP Combine-18'	125,000	800	156.25	2,000	10	15.63	9.38	60	.83	37.50	38.33
10	Stubble chopper-15'	10,000	750	13.33	2,000	10	1.33	.80	90		4.50	4.50
11	Pick-up	12,500	1500	8.33		7	1.19	.50				
12	Pick-up	12,500	1500	8.33		7	1.19	.50				
	Shop tools	12,000	1500	8.00		10	.80	.48				
	Buildings	75,000	1500	50.00		30	1.67	3.00				
TOTAL COST		\$580,750		\$475			\$41.83	\$28.47				
60% OF NEW COSTS*		\$348,450		\$284.70			\$25.10	\$17.08				

* DEFINITIONS:

- YEARS TO TRADE----- The projected life of the machine in years adjusted for excessive annual use.
- OVERHEAD ----- Per acre per year.
- DEPRECIATION ----- "COST PER ACRE" divided by "YEARS TO TRADE"
- INTEREST----- ("COST PER ACRE" X "INTEREST RATE") divided by 2 = average interest cost per acre per year.
- TAR----- Total accumulated repairs. The total cost of repairs during the machine's life expressed as a percent of "NEW COST". Calculated from equations based on equipment type and annual use.
- HOURLY COST OF FUEL----- Diesel fuel, oil and lube costs per hour = HP x cost of diesel fuel/gal X 0.0667.
Gasoline fuel, oil and lube costs per hour = HP x cost of gasoline/gal X 0.0889.
- HOURLY COST OF REPAIRS-- ("NEW COST" X "TAR") divided by ("LIFE IN HOURS").
- 60% OF NEW COSTS ----- Used to reflect a mix of new and used equipment.

COST TO PRODUCE SAFFLOWER AT VARYING PRICES AND YIELDS

	YIELD (lbs./acre)						
	1000	1250	1500	1750	2000	2250	2500
Cultural Costs	105	105	105	105	105	105	105
Harvest Costs	19	19	19	19	19	19	19
Cash Overhead	72	72	72	72	72	72	72
Cash cost/acre	197	197	197	197	197	197	197
Cash cost/cwt	19.65	15.72	13.10	11.23	9.83	8.74	7.86
Investment cost	42	42	42	42	42	42	42
TOTAL COST/ACRE	239	239	239	239	239	239	239
TOTAL COST/CWT	23.87	19.10	15.91	13.64	11.94	10.61	9.55

PER ACRE INCOME ABOVE CASH COSTS AT VARYING PRICES AND YIELDS

Dollars per Ton	YIELD (lbs./acre)						
	1000	1250	1500	1750	2000	2250	2500
200	-97	-72	-47	-22	3	28	53
225	-84	-56	-28	0	28	57	85
250	-72	-40	-9	22	53	85	116
275	-59	-25	10	44	78	113	147
300	-47	-9	28	66	103	141	178
325	-34	7	47	88	128	169	210
350	-22	22	66	110	153	197	241

PER ACRE INCOME ABOVE ALL COSTS AT VARYING PRICES AND YIELDS

Dollars per Ton	YIELD (lbs./acre)						
	1000	1250	1500	1750	2000	2250	2500
200	-139	-114	-89	-64	-39	-14	11
225	-126	-98	-70	-42	-14	14	43
250	-114	-82	-51	-20	11	43	74
275	-101	-67	-32	2	36	71	105
300	-89	-51	-14	24	61	99	136
325	-76	-36	5	46	86	127	168
350	-64	-20	24	68	111	155	199

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