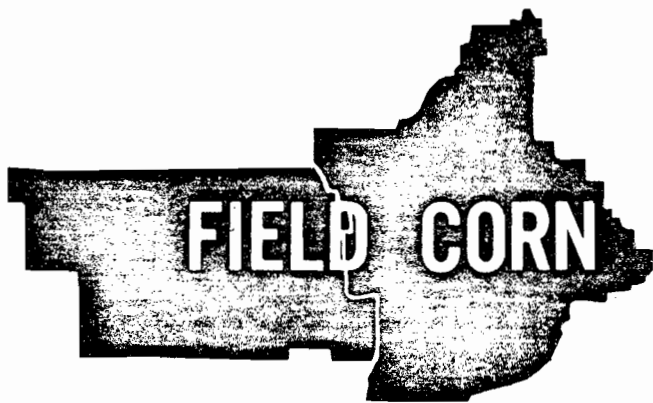


# SAMPLE COSTS OF PRODUCTION



## BUTTE AND GLENN COUNTIES

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## BASIS OF FIELD CORN COST STUDY

1. This study is based on a 1,500 acre field crop operation with 500 acres of field corn. Other crops grown on the ranch may include one or more of the following crops: grain, alfalfa hay, grain sorghum, sugar beets, dry beans, safflower, etc. Much of the equipment is used on the entire acreage some-time during the year.

For reasons of simplicity, we used a landlord-tenant operation with a 75-25 division of the crop. The crop was sold "roadside" at 20% moisture. The landlord pays his own drying costs.

2. In allocating the equipment cost per acre the following calculations were made: (a) "Original Cost" of equipment is the estimated new cost and includes 6% sales tax. (b) "Cost Per Acre" is the new cost divided by the number of acres the equipment will be used on. (c) "Depreciation" is based on the "Per Acre Cost" divided by the expected life of the equipment. (d) "Interest" on investment is figured on one-half of the new cost per acre multiplied by 8%.
3. Miscellaneous expenses are estimated to be about 6% of the total cultural and harvest costs. They include such costs as preparing roadways, general weed control, office, bookkeeping, interest on operating money, etc.
4. Labor costs are based on a \$4.25 hourly rate for skilled labor and \$3.25 hourly rate for unskilled (irrigator). Included are cash wages, compensation insurance, Social Security and other benefits that the employer might pay.
5. Equipment operating costs are listed under fuel and repair. Included is the cost of fuel, maintenance, replacement parts, tires, etc. Tractor charges per hour are: 100-120 HP track diesel \$9.65; 80-90 HP track diesel \$7.50; 100 HP wheel diesel \$4.80 and 80-90 HP wheel diesel \$4.40. This and other information was partially taken from "Machinery Costs and Performance, 1972" (adjusted) by A.D. Reed, University Extension Economist, U.C. Davis.
6. Management (what the grower's decision making is worth) is figured at 5% of the market value of the crop.
7. Provided in this sample study are two different methods of production. One area of production includes silt loam soils which are slow to absorb water. Consequently, corn is planted in a furrow and irrigated via the border and check method.

In other areas of production which include deep loams and clays corn is usually planted on a bed and either pre-irrigated or irrigated up.

8. These sample costs may not represent the cost of any one individual grower but should serve as a useful guide in reviewing the typical costs in field corn production. Growers are encouraged to make use of the column "Grower Costs Per Acre" to permit a comparison of the costs in this study with their own.
9. Growers from Glenn and Butte Counties participated in furnishing information for compiling the basic information in this study. Some information was obtained from agribusiness representatives. Appreciation is expressed to them for their time and help.

EQUIPMENT AND BUILDING LIST

On Deep Loams and Clays

ITEM	ORIGINAL COST	ANNUAL USE (ACRES)	COST PER ACRE	LIFE (YEARS)	NON-CASH OVERHEAD	
					DEPRECIATION	INTEREST AT 8%
Tractor, 100-120 HP Tr. Diesel	\$ 51,500	1,500	\$ 34.33	20	\$ 1.72	\$ 1.37
Tractor, 80-90 HP Tr. Diesel	40,000	1,500	26.67	20	1.33	1.07
Tractor, 100 HP Wheel Diesel	20,000	1,500	13.33	10	1.33	.53
Tractor, 80-90 HP Wheel Diesel	18,000	1,500	12.00	10	1.20	.48
Plow 4-18 hydraulic 2-way	4,500	750	6.00	10	.60	.24
Disk, stubble, 12 ft.	10,200	750	13.60	10	1.36	.54
Disk, offset, 21 ft.	9,500	1,500	6.33	10	.63	.25
Chisel (heavy duty) 16 ft.	3,500	1,500	2.33	10	.23	.09
Springtooth or field cultivator - 30 ft.	4,500	1,500	3.00	10	.30	.12
Spiketooth Adjust. - 30 ft.	400	1,500	.27	10	.03	.01
Rolling cultivator - 6-row	2,600	1,000	2.60	10	.26	.10
Planter, w/sled and incorporator 6-row & bait applicator	11,000	1,000	11.00	7	1.57	.44
Triplane - 16 ft.	6,000	1,500	4.00	15	.27	.16
Landplane - 60 ft.	11,000	1,500	7.33	20	.37	.29
Bedding tools	1,000	1,000	1.00	10	.10	.04
Ditcher - 4 ft.	1,600	1,500	1.07	15	.07	.04
Fertilizer attachments (dry and liquid)	5,000	800	6.25	10	.63	.11
sol carrier (used)	4,000	1,500	2.67	10	.27	.11
Combine 16 ft., S.P.	34,000	800	40.00	10	4.00	1.60
Corn header 6-row	10,000	500	20.00	10	2.00	.80
Truck (used)	5,000	1,500	3.33	5	.67	.13
Pickup - 3/4 ton	6,000	1,500	4.00	5	.80	.16
2 Pickups (used)	6,000	1,500	4.00	3	1.33	.16
Bankout wagon, pull type (used)	3,500	800	4.38	10	.44	.18
Siphons	4,000	1,500	2.67	10	.27	.11
Shredder (15')	3,500	800	4.38	10	.44	.18
Shop tools	6,000	1,500	4.00	15	.27	.16
Buildings	12,000	1,500	8.00	20	.40	.32
<b>TOTAL</b>	<b>\$294,300</b>		<b>\$248.54</b>		<b>\$22.89</b>	<b>\$9.93</b>

SAMPLE COSTS TO PRODUCE FIELD CORN  
On Deep Loams and Clays  
March 1975

CULTURAL OPERATION	HOURS PER ACRE	COSTS PER ACRE			TOTAL	GROWER'S COST
		LABOR	FUEL & REPAIRS	MATERIALS KIND & QUANTITY COSTS		
Stubble disk 2x	.50	\$ 2.13	\$ 6.75		\$ 8.88	
Landplane 2x (every other yr)	.30	1.28	3.95		5.23	
Chisel or offset 2x	.32	1.36	4.53		5.89	
Fertilize (inject N)	.20	.85	1.50	200 lbs N/A @ \$22 = \$44 Rent rig \$1/A = \$45.00	47.35	
Triplane	.20	.85	1.80		2.65	
Disk or springtooth	.20	.89	1.44		2.33	
List beds	.15	.64	1.05		1.69	
Pre-irrigate or irrigate up	.85	2.76	--	6 acre inches @ \$3.85/A ft. = 1.93	4.69	
Roll beds 2x (rolling cultivator)	.40	1.70	2.48		4.18	
Plant & apply starter fert., herb. & bait	.60	2.55	8.28	Starter fert. @ \$33, seed @ \$15, bait @ \$3.18, band herb. @ \$3.80 = 54.98	65.81	
Cultivate & furrow out	.20	.85	1.24		2.09	
Irrigate 7x	5.60	18.20	--	3½ acre ft. @ \$3.85/A ft. = 13.48	31.68	
Ditch preparation (season) 3x	.10	.43	1.11		1.54	
Mite control	--	--	--	Custom, airplane @ \$4, miticide @ \$7.50 = 11.50	11.50	
Miscl. labor (downtime & move & service equipment)	1.00	4.25	--		4.25	
Shred stalks	.20	.85	1.12		1.97	
<b>TOTAL CULTURAL COSTS</b>		<b>\$39.59</b>	<b>\$35.25</b>		<b>\$126.89</b>	<b>\$201.73</b>
<b>Harvest Operation</b>						
Combine	.45	1.92	6.90		8.82	
Bankout (haul to roadside)	.45	1.92	1.35		3.27	
Drying (3/4 of crop)				20% moisture @ \$4.50/ton = 14.76	14.76	
<b>TOTAL HARVEST COSTS</b>		<b>\$3.84</b>	<b>\$8.25</b>		<b>\$14.76</b>	<b>\$26.85</b>
<b>Cash Overhead</b>						
Miscellaneous (office, etc.)					13.71	
Taxes & insurance					2.71	
Rent 25% x 8000 lbs/A @ 15% moisture = 2000 x \$5.50 = \$110.00					110.00	
<b>TOTAL CASH OVERHEAD</b>					<b>\$126.42</b>	
<b>TOTAL CASH COSTS</b>					<b>\$355.00</b>	
Management Fee 5% of 8000 @ \$5.50/awt					\$ 22.00	
<b>Investment</b>						
		<u>Annual Costs</u>				
	<u>Per Acre</u>	<u>Depreciation</u>	<u>Interest</u>			
Equipment & shop building	\$248.54	\$22.89	\$9.93		\$ 32.82	
<b>TOTAL COST PER ACRE</b>					<b>\$409.82</b>	
Cost per hundred at 8000 lbs/acre					\$ 5.12	
<b>PER ACRE AT 8000 lbs/A (15½% moisture) AT VARIOUS PRICES PER HUNDRED</b>						
Price per hundred	\$5.00	\$5.50	\$6.00	\$6.50		
Income per acre	\$2.18	\$30.18	\$58.18	\$86.18		

EQUIPMENT AND BUILDING LIST

On Silty Loam Soils

ITEM	ORIGINAL COST	ANNUAL USE (ACRES)	COST PER ACRE	LIFE (YEARS)	NON-CASH OVERHEAD	
					DEPRECIATION	INTEREST AT 8%
Tractor, 100-120 HP Tr. Diesel	\$ 51,500	1,500	\$ 34.33	20	\$ 1.72	\$ 1.37
Tractor, 80-90 HP Tr. Diesel	40,000	1,500	26.67	20	1.33	1.07
Tractor, 100 HP Wheel Diesel	20,000	1,500	13.33	10	1.33	.53
Tractor, 80-90 HP Wheel Diesel	18,000	1,500	12.00	10	1.20	.48
Plow 4-18 hydraulic 2-way	4,500	750	6.00	10	.60	.24
Disk, stubble, 12 ft.	10,200	750	13.60	10	1.36	.54
Disk, offset, 21 ft.	9,500	1,500	6.33	10	.63	.25
Chisel (heavy duty) 16 ft.	3,500	1,500	2.33	10	.23	.09
Springtooth or field cultivator - 30 ft.	4,500	1,500	3.00	10	.30	.12
Spiketooth Adjust. - 30 ft.	400	1,500	.27	10	.03	.01
Rolling cultivator - 6-row	2,600	1,000	2.60	10	.26	.10
Planter - 6-row	2,800	1,000	2.80	10	.28	.11
Triplane - 16 ft.	6,000	1,500	4.00	15	.27	.16
Landplane - 60 ft.	11,000	1,500	7.33	20	.37	.29
Combine 16 ft., S.P.	34,000	800	40.00	10	4.00	1.60
Corn header - 6-row	10,000	500	20.00	10	2.00	.80
Saddle tanks (2 sets) w/fert. attachments (dry & liquid)	5,000	800	6.25	10	.63	.25
Tool carrier (used)	4,000	1,500	2.67	10	.27	.11
it applicator	1,000	500	2.00	10	.20	.08
weed & inspect sprayer	3,500	1,000	.35	15	.02	.01
Truck (used)	5,000	1,500	3.33	5	.67	.13
Pickup - 3/4 ton	6,000	1,500	4.00	5	.80	.16
2 Pickups (used)	6,000	1,500	4.00	3	1.33	.16
Bankout wagon, pull type (used)	3,500	800	4.38	10	.44	.18
Shredder (15 ft.)	3,500	800	4.38	10	.44	.18
Shop tools	6,000	1,500	4.00	15	.27	.16
Buildings	12,000	1,500	8.00	20	.40	.32
TOTAL	\$273,200		\$247.95		\$21.38	\$9.50

SAMPLE COSTS TO PRODUCE FIELD CORN  
On Silty Loam Soils  
March 1975

CULTURAL OPERATION	HOURS PER ACRE	COSTS PER ACRE			TOTAL	GRC COST
		LABOR	FUEL & REPAIRS	MATERIALS KIND & QUANTITY COSTS		
Stubble disk 2x	.50	\$ 2.13	\$ 6.75		\$ 8.88	
Landplane 2x (every other yr)	.30	1.28	3.95		5.23	
Chisel or offset disk 2x	.32	1.36	4.53		5.89	
Fertilize (inject N)	.20	.85	1.50	150 lbs N/A (aqua) @ .22 = \$33 Rent rig \$1 = \$34.00	36.35	
Triplane	.20	.85	1.80		2.65	
Prepare borders	.10	.42	.51		.93	
Pre-irrigate	.50	1.62	--	8 acre inches @ \$3.85/acre ft. = 2.56	4.18	
Harrow spiketooth	.10	.42	.54		.96	
Harrow springtooth	.20	.85	1.44		2.29	
Plant & apply starter fert., and bait	.33	1.40	2.24	Starter fert. @ \$33, seed @ \$15, bait @ \$3.18 = 51.18	54.82	
Cultivate 1x	.20	.85	1.24		2.09	
Weed control 2/3 of acreage	.20	.85	1.08	Herbicide 2/3 of acreage = 5.90	7.83	
Mite control	--	--	--	Custom, airplane @ \$4, miticide @ \$7.50 = 11.50	11.50	
Irrigate 9x	2.25	7.31	--	3 acre ft. @ \$3.85/A ft. = 11.55	18.86	
Miscl. labor (downtime & move & service equipment)	1.00	4.25	--		4.25	
Shred stalks	.20	.85	1.12		1.97	
<b>TOTAL CULTURAL COSTS</b>		<b>\$25.29</b>	<b>\$26.70</b>	<b>\$116.69</b>	<b>\$168.68</b>	
<b>Harvest Operation</b>						
Combine	.40	1.70	6.12		7.82	
Bankout (hauling to roadside)	.40	1.70	1.20		2.90	
Drying (3/4 of crop)				20% moisture @ \$4.50/ton = 12.92	12.92	
<b>TOTAL HARVEST COSTS</b>		<b>\$3.40</b>	<b>\$7.32</b>	<b>\$12.92</b>	<b>\$23.64</b>	
<b>Cash Overhead</b>						
Miscellaneous (office, etc.)					11.54	
Taxes & insurance					2.48	
Rent 25% x 7000 lbs/A (15½% moisture) = 1750 lbs x \$5.50/cwt = \$96.25					96.25	
<b>TOTAL CASH OVERHEAD</b>					<b>\$110.27</b>	
<b>TOTAL CASH COSTS</b>					<b>\$302.59</b>	
Management Fee 5% of 7000 lbs @ \$5.50/cwt					\$ 19.25	
<b>Investment</b>				<b>Annual Costs</b>		
		<b>Per Acre</b>		<b>Depreciation</b>	<b>Interest</b>	
Equipment & shop building		\$237.95		\$21.38	\$9.50	\$ 30.88
<b>TOTAL COST PER ACRE</b>						<b>\$352.72</b>
Cost per hundred at 7000 lbs/acre						\$ 5.04
<b>PER ACRE AT 7000 lbs/A (15½% moisture) AT VARIOUS PRICES PER HUNDRED</b>						
Price per cwt		\$5.00	\$5.50	\$6.00	\$6.50	
Income per acre		\$7.78	\$32.28	\$56.78	\$81.28	

March 1975  
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