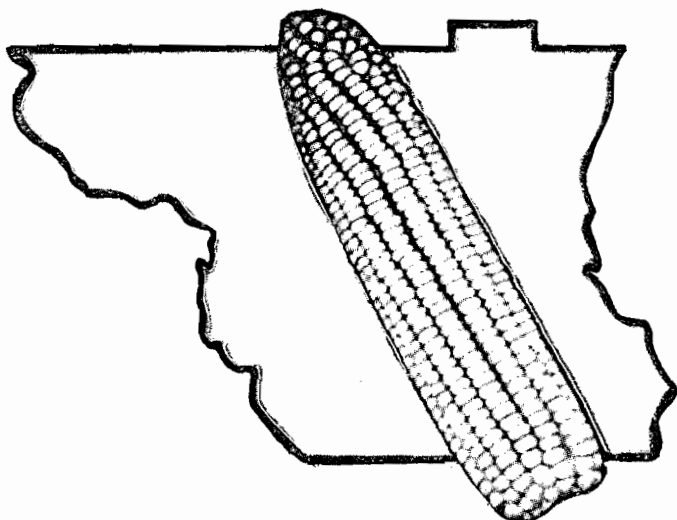


CO-SV-73

SAMPLE COSTS TO PRODUCE CORN



IN COLUSA COUNTY

P. O. Box 180, Colusa, California 95932 Telephone 458-2105

Cooperative Extension Work in Agriculture and Home Economics

U. S. Department of Agriculture, University of California and Colusa County

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SAMPLE COSTS TO PRODUCE CORN IN COLUSA COUNTY 1973

YIELD: 7500 lbs. @ 18% moisture
7000 lbs. @ 12.5% moisture

LABOR RATES: \$2.70/hr - Tractor Driver
\$2.25/hr - Irrigator

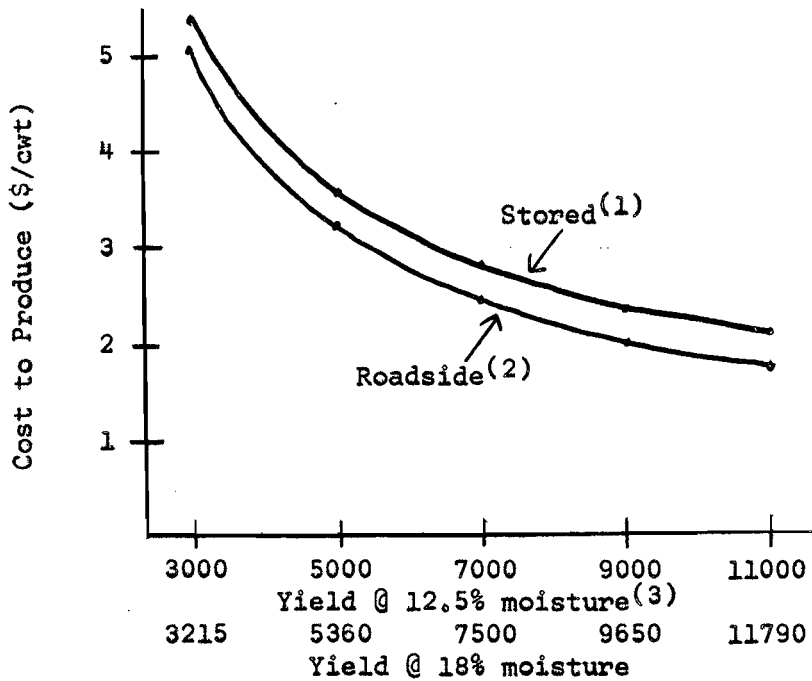
Operation	Hours Per Acre	Labor	Fuel & Repairs	Description of Materials	Total Mat'ls	Total	Your Cost/Acre
Cultural Costs							
Fall Stubble Disk	0.33	0.90	2.20			3.10	
Landplane	0.25	0.68	1.35			2.03	
Disk 2X	0.33	0.90	1.68			2.58	
Springtooth	0.15	0.40	0.50			0.90	
List & Fertilize	0.30	0.81	0.94	160# N @ 8¢/#	12.80	14.55	
Plant	0.50	1.35	1.32	Seed	14.00		
Fertilizer				Starter 20 gal/Ac	9.30	25.97	
Irrigate 8X (1 preplant and 7 Crop)	4.00	9.00	1.00	Water	8.00	18.00	
Cultivate	0.40	1.08	0.82			1.90	
Weed Control	0.20	0.54	0.41	Herbicide	0.95	1.90	
Insect or Mite Control	0.20	0.54	0.41	Material	4.30	5.25	
Miscellaneous (move, set up & service equipment)	0.67	1.80	0.50			2.30	
TOTAL CULTURAL COSTS	7.33	\$18.00	\$11.13		\$49.35	\$ 78.48	
Harvest Costs							
Combine		Contract @ \$4.50/undried ton					16.88
Hauling		Contract @ \$2.00/undried ton					7.50
Drying (renter's share)		Contract @ \$2.00/ton					5.25
Total Costs To Harvest						\$ 29.63	
Post-Harvest Costs							
Storage (5250 lbs.)		Contract @ \$4.00/ton					10.50
Chop Stubble	0.20	0.54	0.41			0.95	
Total Post-Harvest Costs	0.20	\$ 0.54	\$ 0.41			\$ 11.45	
TOTAL HARVEST COSTS	0.20	\$ 0.54	\$ 0.41			\$ 41.08	
Cash Overhead							
Misc., Office, etc.		6% of cash costs					7.16
Taxes & Insurance on Equipment							1.80
Rent @ 25% of gross							48.48
TOTAL CASH OVERHEAD						\$ 57.44	
TOTAL CASH COST						\$177.00	
Annual Cost							
<u>INVESTMENT</u>	<u>Per Acre</u>	<u>Depreciation</u>		<u>Interest</u>			
Buildings	\$ 5.00	\$ 0.17		\$0.17			
Equipment	122.94	12.36		4.30			
Total	\$127.94	\$12.53		\$4.47		\$ 17.00	
TOTAL COST PER ACRE						\$194.00	
Cost per cwt. @ 7000 lbs. yield after shrinking to 12.5% moisture with storage paid for the year.						\$ 2.77	0

5.540

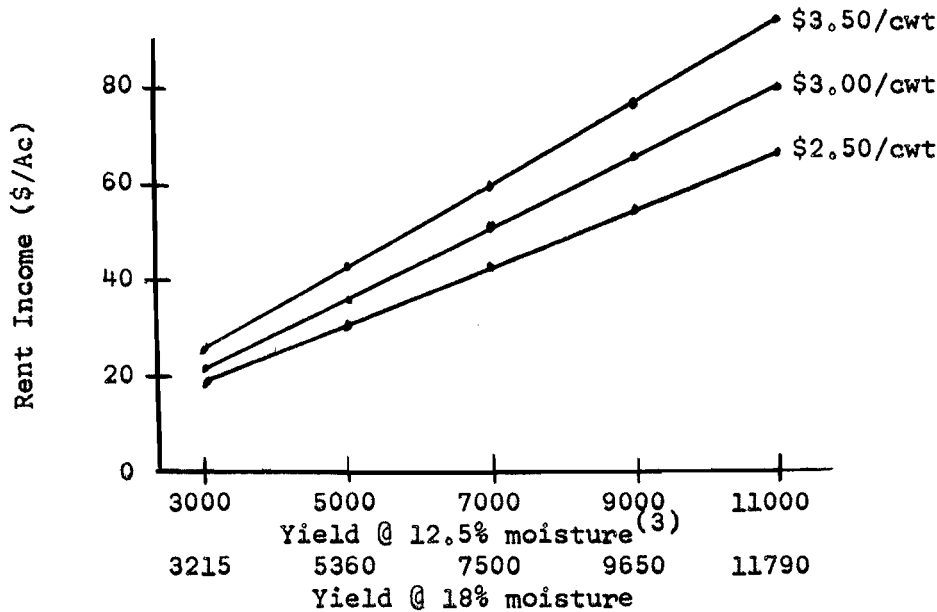
EQUIPMENT AND BUILDING LIST

Item	Original Cost	Annual Use (acres)	Cost Per Acre	Life (yrs.)	Depreciation
Crawler, Diesel, 86 hp	\$ 36,200	1200	\$ 30.13	15	\$ 3.01
Crawler, Diesel, (Used) 60 hp	9,000	1200	7.50	10	.75
Wheel Engine, Diesel, 70 hp	10,450	800	13.06	10	1.31
Wheel Engine, Gas (Used) 50 hp	4,000	800	0.50	5	.10
Stubble Disk, 10'	6,600	600	11.00	10	1.10
Subsoiler, 10'	3,600	600	6.00	10	.60
Landplane, 12' x 60'	4,800	600	8.00	15	.53
Disk, 18'	3,200	1200	2.67	10	.27
Springtooth, 24'	2,600	800	3.25	10	.32
Harrow, 32'	1,120	800	1.40	20	.07
Roller, 20'	2,500	800	3.12	20	.16
Lister, 4 row	1,000	400	2.50	10	.25
Fertilizer Attachments	1,200	400	3.00	10	.30
Planter, 4 row	2,400	400	6.00	10	.60
Ditcher, 4'	1,600	800	2.00	15	.13
Cultivator, 4 row	1,200	400	5.00	10	.50
Sprayer	1,350	800	1.69	10	.17
Rotary Chopper, 9'	1,550	400	3.88	10	.39
Tool Carrier, 30'	2,100	1200	1.75	15	.11
Fuel Wagon	700	1200	0.58	20	.29
Truck (Used) 1-1/2T	3,000	1200	2.50	10	.25
Pickup (New)	3,400	1200	2.83	5	.57
Pickup (Used)	1,500	1200	1.25	5	.25
Shop Building	6,000	1200	5.00	30	.17
Shop Tools	4,000	1200	3.33	10	.33
TOTALS	\$115,070		\$127.94		\$12.53

RENTER'S COST PER CWT TO PRODUCE
CORN AT VARIOUS YIELDS



LANDOWNER'S RETURN PER ACRE AT
VARIOUS SELLING PRICES AND YIELDS⁽⁴⁾



- (1) Costs to produce corn including drying, hauling, shrinkage from 18% to 12.5% moisture and storage for one year.
- (2) Costs to produce corn and sell at roadside, including shrinkage from 18% to 12.5% moisture, but no hauling or storage costs.
- (3) During drying grain loses weight. The main loss is the weight of water lost, with a minor part of the weight loss resulting from the removal of dust, chaff, stalk pieces, etc. The total weight loss is called "shrinkage" and for the purposes of this study was estimated to be 6.7% when drying from 18% to 12.5% moisture.
- (4) Landowner's return per acre is the net return after shrinkage and cost of drying are removed.

BASIS OF FIELD CORN COST STUDY

1. This cost study is based on a 1200 acre field and row crop operation with 200 acres of field corn. Other crops grown on the farm may include alfalfa hay, grain sorghum, beans, winter cereals, rice, safflower, tomatoes, etc. This sample cost is not intended to represent any specific farm nor average for Colusa County.
2. This study includes all costs of production except the cost of management.
3. In determining equipment cost per acre the following calculations are included: a) "Original Cost" is the estimated new cost. b) The "cost per acre" is calculated by dividing the equipment cost by the average number of acres upon which the equipment is used annually. c) "Depreciation" is calculated by dividing the "cost per acre" by the expected life of the equipment. d) "Interest" on investment is calculated by multiplying 7% times 1/2 the equipment cost per acre, $\$127.94 \times 1/2 = \$63.97 \times 7\% = \$4.47$.
4. Equipment operating expense is listed under fuel and repair. Included is the cost of fuel, maintenance, replacement parts, etc. Tractor horsepower under continuous load is estimated at 75% of maximum. Tractor charges per hour are: 86 HP Crawler, diesel, \$3.65; 60 HP Crawler, diesel, \$2.10; 70 HP Wheel, diesel, \$1.60; 50 HP Wheel, gas, \$1.50.
5. Labor cost is based on a \$2.70 hourly rate for tractor drivers, and a \$2.25 hourly rate for irrigators. Included in the hourly rate are cash wages, Social Security, and Workmen's Compensation.
6. Miscellaneous labor expense includes time to service, repair, and move equipment.
7. Miscellaneous overhead expense is based on 6% of the total cultural and harvest costs. These costs include office, bookkeeping, preparing road, general weed control, interest on operating capital, etc.

8. Taxes on equipment valued at \$127.94 per acre \times 50% \times 25% = assessed value of \$16.00 \times \$7.50 tax rate = \$1.20 per acre. Insurance on \$115,000 of equipment \times 80% = \$92,000 insurance value \times \$0.775 per \$100 \div 1,200 acres = \$0.60 per acre.
9. For the purpose of this study, the average grain moisture content at harvest was established at 18%. Drying to 15.5% is necessary to meet standards for U. S. No. 2 corn, but stored grain is usually dried to 12.5% to prevent insect and mold damage. When grain is dried the loss of moisture results in a loss of weight which increases with increasing moisture content of harvested grain. Usually the removal of dust, chaff, stalk, etc., is only a minor portion of the weight loss that occurs during drying. The total weight loss is called "shrinkage" and for the purposes of this study was considered to be 6.7% when drying from 18% to 12.5% moisture.
10. Two costs of production were determined for the purpose of this study. The first cost was calculated to show all production and storage costs including shrinkage loss. The costs to produce corn that is sold at roadside or in the field included production and drying costs, shrinkage, but no storage or hauling costs.
11. Methods and cultural practices used to grow field corn in Colusa County varies from grower to grower. Each grower can use his own cost figures in the "Your Cost/Acre" column to determine production costs for his operation.

300 copies
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This cost study was prepared by Robert Petersen, Colusa County Farm Advisor. It was made possible by the help of growers, fieldmen and others in Colusa County. Their help is greatly appreciated as is the assistance of John Prato, Extension Agronomist, Phil Parsons, Extension Economist, and Tom Kearney, Yolo County Farm Advisor.

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