



Fruit & Nut
Pears

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cost of producing

PEARS

in sonoma county

UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE

UC Cooperative Extension



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C. B. Alcorn, Director, California Agricultural Extension Service.
UC Cooperative Extension

COST OF PRODUCING PEARS IN SONOMA COUNTY

The expense of producing a ton of canning pears has a broad range of costs. The average per acre yield of this crop shows a great variance, from 6 to 7 tons, to 15 tons used by the study committee, to 25 to 30 tons produced by some growers. Many factors influence this production picture, such as soil and climate which cannot be controlled by man. However, those grower-controlled, cultural practices, such as fertilizer application, irrigation, tree population, and insect and disease control can and do have a direct bearing on yields.

The 15-ton per acre figure projected in this study was selected by a group of growers who feel this is a production level any grower should attain under good management if soils are suitable and irrigation is used.

All items pertinent to producing pears have been taken into consideration. Each of the inputs in the cost table to follow is realistic and it is recommended that growers compare this table of expenses in analyzing other orchard situations.

A grower can effectively measure his operations and costs by substituting individual orchard cost figures in direct comparison to the data which follows.

Growers with high yields will know why and those with lower yields may help their profit column by putting to work some of the resources discussed in this publication. Practices considered in this analysis are in common use in well-managed orchards.

SAMPLE INPUTS AND COSTS OF PRODUCING PEARS

Sonoma County, with a yield of 15 tons per acre
1962

	Man	Trac-	Truck	Cost per Acre	Cost per Ton
	Labor	tor			
Hours per Acre					
Pruning, 108 trees	100.0			\$150.00	
Brush disposal, haul out big wood, chop	3.5	2.5		7.75	
Apply fertilizer, once dry	1.0	1.0		2.50	
Cultivate, 6 times	5.0	5.0		16.25	
Spray 11 times, sprayer, \$2 hr.	6.0	6.0		29.25	
Dust for blight, 10 times	1.5	1.5		3.75	
Cutting blight and inspecting	10.0			15.00	
Irrigation, 4 times, sprinkler	6.0			9.00	
Miscellaneous other cultural work and propping	8.0	1.0	2.0	17.00	
Total cultural labor and field power	141.0	17.0	2.0	250.50	\$16.70
Picking at \$6 per 1,200 lb. bin	120.0			150.00	10.00
Supervision, moving and loading bins	9.0	3.0		16.50	1.10
Hauling plus extra truck hire \$7.50	5.0		5.0	25.00	1.67
Total harvesting labor and field power	134.0	3.0	5.0	191.50	12.77
Total labor and field power	275.0	20.0	7.0	442.00	29.47
Irrigation water, power to pump 2 acre feet at \$4.				8.00	
Fertilizers, spring dry and summer in water				24.00	
Spray materials \$130, dust \$30.				160.00	
Miscellaneous materials, new trees, rodent bait, etc.				7.00	
Total material cost				199.00	13.27
Total labor, field power and material costs				641.00	42.74
General, expense, office, car, etc., estimated at 5% of above				32.05	
County taxes, land, trees, and equipment				26.00	
Repairs, other than tractors and trucks				6.00	
Compensation, social security and other insurance				23.00	
Total cash overhead costs				87.05	5.80
Total cash costs				728.05	48.54
Investment Overhead based on an 80 acre orchard unit	Original cost 80 acres	Average Value	6% int.	Depre- ciation	
		Dollars per Acre			
Trees, cost \$1,200 an acre, 40 yrs.	96,000	600.00	36.00	30.00	
Building for equipment	4,000	25.00	1.50	1.25	
Irrigation system and pipe	12,000	75.00	4.50	12.25	
Tractors, Fork lift, trucks	20,000	125.00	7.50	17.50	
Tillage equipment and chopper	2,400	15.00	.90	2.20	
Spray and duster	7,200	45.00	2.70	5.00	
Misc., ladders, bags, props, etc.	6,400	40.00	2.00	6.00	
Housing for help	8,000	50.00	3.00	5.00	
Land at agricultural value	80,000	1000.00	60.00	--	
Total investment and depre.	236,000	1975.00		79.20	5.28
Total cash and depreciation costs				807.25	53.82
Interest on investment at 6%			118.50	118.50	7.90
TOTAL all costs				\$925.75	\$61.72

Labor costs above are figured at the following hourly rates: Man labor, \$1.50; 40 hp. crawler tractor, \$1.75; 30 hp. wheel tractor, \$1; sprayer engine, \$2, 2-ton truck, \$2; pickup, \$1.50. These rates are cash costs only for fuel, oil, repairs, insurance, and license for trucks.

Interest on investment is figured at 6% of the average lifetime value for depreciable items, which is estimated at one-half of the original cost at current prices.

PEAR DECLINE

In every pear discussion, Pear Decline is sure to be mentioned and necessarily should be a part of this report to growers. Management will want to carefully evaluate the problem and use the best in long-range planning. Much is unknown about Decline and its final impact on the California pear industry; and until the needed controls are found for the disease, growers will be dealing with questionable factors.

This is not to say growers should discontinue replanting, neglecting insect and other disease control operations, or miss carrying through a sound fertilizer and irrigation program. All too often disasters like this tend to defer the best attention in management and sometimes cause growers to overlook the control of well-known deterrants to production.

California supplies a large part of the nation's canning and shipping pears and will continue to hold its position in the market place, but the location of the crop could change over the years.

Because increased yields are a must, pears need to be on good land and under irrigation. Planting distances are the subject of much discussion and some unusual spacings are expected in new orchards. To increase yields, growers are using more trees per acre and improved machinery. Mechanical harvesting aids are in the picture, and growers are trying hedge rows and mechanical pruning (shearing) to produce fruit in a position conducive to mechanical harvesting.

Yield--Yield per acre varies widely from orchard to orchard, and somewhat in a particular orchard from year to year. Costs on the other size are for a yield of 15 tons per acre, representative of well cared for, mature trees on good soil. Here are some estimated costs for orchards with other yields.

COSTS IN ORCHARDS WITH DIFFERENT AVERAGE YIELDS

Yield-- Tons per Acre	7.5	10.0	12.5	15	20
All Costs per Acre Except Harvesting	525.00	600.00	690.00	715.75	730.00
Harvesting-- \$14 a Ton Including Overhead	105.00	140.00	175.00	210.00	280.00
Total Cost per Acre	630.00	740.00	865.00	925.75	1010.00
Total Cost per Ton	84.00	74.00	69.20	61.72	50.50

FIVE-YEAR PRODUCTION DATA

Year	Acreage		Production		Values	
	Non-Bearing	Bearing	Tons per Acre	Total Tons	per Ton	Total
1957	328	1,728	7.00	12,060	58.27	5,233,044
1958	415	1,735	5.80	10,070	80.84	814,017
1959	434	1,768	6.30	11,212	60.83	682,020
1960	569	1,621	7.25	11,746	77.06	905,101
1961	609	1,629	7.10	11,558	96.00	1,114,500
Av.	471	1,696	6.69	11,329	74.60	1,749,736