

*as Reed*

**SAMPLE INPUTS AND COSTS FOR PEARS IN SANTA CLARA COUNTY**

Mature Orchard - With a Yield of 15 Tons per Acre

	Hours per acre				Cost Per Acre	Cost Per Ton
	Man Labor	30 hp Tractor	20 hp Tractor	Truck		
Pruning, 108 trees	108				145.80	
Brush disposal, large wood only	2		1		3.70	
Spraying 8 times, (incl. sprayer \$1.50 hr.)	4	4			18.00	
Cultivation, Disk 6x Check and Break ridges 4x	5	5			15.00	
Blight cutting around 4 times	20				25.00	
Irrigation 4x	10				13.50	
Misc. - Fertilize, hoe, cover crop, etc.	8	1		2	16.10	
<b>Total cultural labor and field power</b>	<b>157</b>	<b>10</b>	<b>1</b>	<b>2</b>	<b>237.10</b>	<b>15.80</b>
Picking	150				187.50	12.50
Supervision, loading, hauling out and misc.	10		3 (f)	2	21.25	1.42
<b>Total Harvesting</b>	<b>160</b>		<b>3</b>	<b>2</b>	<b>208.75</b>	<b>13.92</b>
<b>Total labor material and field power</b>	<b>317</b>	<b>10</b>	<b>4</b>	<b>4</b>	<b>445.85</b>	<b>29.72</b>
Irrigation water, power to pump 2 acre feet, 150' head					12.00	
Spray materials					68.00	
Fertilizers - average annual					36.00	
Miscellaneous - cover crop seed, disinfectants, etc.					6.00	
<b>Total material cost</b>					<b>122.00</b>	<b>8.13</b>
<b>Total labor field power and materials</b>					<b>567.85</b>	<b>37.85</b>
General expense, office, car, etc., estimated at 5% of above					28.39	
County taxes, land, trees, improvements, equipment					45.00	
Repairs to equipment not covered in above hourly rates					8.00	
Compensation insurance \$16.00, Social Security \$1.50; other \$.50					18.00	
<b>Total cash overhead costs</b>					<b>99.39</b>	<b>6.63</b>
<b>Total cash costs</b>					<b>667.24</b>	<b>44.48</b>
Investment based on an 80 acre orchard unit	Original cost 80 acres	Average Value	6% int.	Depreciation		
		Dollars per acre				
Trees, cost \$1400 - 50 year bearing	112,000	700.00	42.00	28.00		
Implement shed and shop	4,000	25.00	1.50	2.50		
Help housing	8,000	50.00	3.00	4.00		
Irrigation system	20,000	125.00	7.50	12.50		
Tractors, trucks etc.	16,600	103.75	6.23	17.00		
Trillage equipment	2,000	12.50	.75	2.00		
Sprayer	6,000	37.50	2.25	7.50		
Misc. ladders, buckets etc.	3,000	18.75	1.13	4.00		
Land, agricultural value	120,000	1,500.00	90.00	-----		
<b>Total investment &amp; depreciation</b>	<b>291,600</b>	<b>2,572.50</b>		<b>77.50</b>	<b>77.50</b>	<b>5.17</b>
<b>Total cash &amp; depreciation costs</b>					<b>744.74</b>	<b>49.65</b>
Interest on investment			154.36		154.36	10.29
<b>TOTAL ALL COSTS</b>					<b>899.10</b>	<b>59.94</b>

Labor costs above are figured at the following hourly rates: Tractor driver \$1.50; skilled hand labor \$1.35; other \$1.25; 30 hp. crawler tractor \$1.50, 20 to 30 hp. wheel tractor with fork lift \$1.00; truck \$2.00; sprayer engine \$1.50. These power equipment rates are cash costs only - fuel, repairs and also license and insurance for the truck.

Investment in equipment is figured for an 80 acre orchard although this could be partly in other fruits. Average value per acre for all items that depreciate is figured at half the original cost, since depreciation reduces remaining value to zero or salvage value over the full life. Interest on investment is figured at six percent on the average value of facilities and on the "agricultural value of land". Interest is included as a proper part of total cost of production.

## BARTLETT PEARS IN SANTA CLARA COUNTY

San Jose, September 1961

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The Santa Clara Valley is often spoken of as the cradle of the California Pear Industry. The Valley's geographical location, proximity to the Pacific Ocean, and topography give the area mild and equable weather. Where a supply of water is available, practically all of the 728+ pear orchards within the county are irrigated.

Pears were grown in California as early as 1767. Santa Clara County had 1,530 bearing acres of pears in 1916. Twenty years ago, 1941, the local pear industry had 6,332 bearing acres that yielded 38,475 tons. The crop that year was valued at \$1,649,060 or an average of \$40.00 per ton.

The following summary represents all pear varieties. Data presented in the 1960 Crop Report indicates that there are 71% Bartletts, 27% Hardys and 2% planted to other varieties, primarily D'Anjou, Bosc and Comice.

Year	Acreage		Production (tons)		Value	
	Non Bearing	Bearing	Total	Per Acre	Total	Per Ton
1956	553	6,673	72,800	10.9	\$5,208,203	\$65.00
1957	483	6,711	78,925	11.7	\$4,563,125	\$54.33
1958	390	6,675	68,550	10.3	\$5,638,650	\$82.00
1959	907	6,436	74,950	11.6	\$4,543,000	\$57.88
1960	754	6,158	69,670	11.3	\$5,441,500	\$66.10
Five year average:			72,979	11.16	\$5,078,895.60	\$65.06

Data on acreage, production and value extracted from Agricultural Commissioners Report.

Yield - The yield per acre determines profit per acre and costs per ton. Yields vary from orchard to orchard and year to year in the same orchard. A good commercial yield is 15 tons per acre and this was used in showing detailed costs on the other side. Below is shown the effect of varying yield on costs with all costs except harvesting the same for all yields.

## Effect of Yield per Acre on Cost per Acre and per Ton

Yield tons per acre	10	15	20	25	30	35
Costs per acre except harvesting	679.91	679.91	679.91	679.91	679.91	679.91
Harvesting cost at \$14.61 per ton*	146.10	219.19	292.20	365.25	438.30	511.35
Total cost per acre	826.01	899.10	972.11	1037.16	1118.21	1191.26
Cost per ton	82.60	59.94	48.65	41.49	37.27	34.04

\*- Includes 5% general expense

+ - U.S. Agricultural Census 1954