

APPLE PRODUCTION COSTS  
IN SANTA CRUZ COUNTY

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Arthur Shultis  
Farm Management SpecialistEdward C. Koch  
Farm Advisor

Santa Cruz County, with over 10,000 acres of apples, produces over 1/3 of the State's total crop. Varietal importance is shown below as of 1960 Agricultural Commissioner's Report:

Variety	Bearing Acres	Non-bearing Acres	Total Acres
Newtown Pippin	4,540	380	4,920
Delicious All Strains	2,780	1,385	4,165
All other varieties	1,240	220	1,460
Total	8,560	1,985	10,545

The following data applies to all varieties. Thinning costs were based primarily on Newtown Pippins where spray thinning materially reduced the cost of hand thinning. Some allowance for higher costs with other varieties should be considered.

Yield - The sample inputs and cost per acre on the other side are shown for 15 tons of salable fruit. This could be any proportion of shipping and processing fruit. It could be a total of 830 - 36 lb. boxes or the equivalent. Picking of 850 boxes equivalent allows for shrinkage and grading loss. This yield is a good commercial yield slightly above the 13.8 tons estimated by the County Agricultural Commissioner for 1960, but is below some obtained in the best orchards.

Production costs can vary greatly among individual producers with size of operation and yield per acre being the most important factors.

Overhead costs on equipment were based on a 50 acre orchard which is a reasonable size for present day equipment operation and distribution of these costs.

These costs are for the use of individual growers to serve as a basis for analyzing their own operations and to help others not familiar with such costs. They do not represent average costs for producing apples in the county.

Inputs and costs shown in the table on the other side should be considered average over a period of years although based on costs and wage rates in 1960 and 1961.

Bins and fork-lift operation have been included in this study for the first time. Investment includes enough bins to hold about 75% of the total production, at 1120 lbs. per bin.

Orchard management and marketing are additional costs to those shown in the tables.

SAMPLE INPUTS AND COSTS IN SANTA CRUZ COUNTY, 1961  
Mature Orchard with a Yield of 15 tons per Acre

APPLES

	Man	Cr. 30	W. 30	2-ton	Cost per acre	Cost per ton
	labor	Tractor	Tr.&Fk.	Truck		
Hours Per Acre						
Pruning	72.0				90.00	
Brush disposal, large wood only	3.0			1.0	5.70	
Applying fertilizer once	.6		0.5	0.1	1.61	
Spraying, 7 times (\$2 hr. sprayer)	3.5	.5	3.0	(3.5spr)	16.75	
Cultivation	4.0	4.0			12.00	
Irrigation 2 times, sprinkler	4.0			0.2	5.36	
Thinning, hand after spray thin	40.0				50.00	
Propping and store props.	6.0			2.0	11.60	
Miscellaneous other work	6.0	.5	.5	1.0	11.20	
<b>Cultural labor and field power</b>	<b>139.1</b>	<b>5.5</b>	<b>4.0</b>	<b>4.3</b>	<b>204.22</b>	<b>13.62</b>
Picking 800 boxes at 15¢	103.0				120.00	} 8.40
Picking windfalls 50 boxes at 12¢	6.0				6.00	
Supervision, load, haul	10.0		4 fk.	6.0	29.80	1.98
<b>Total harvesting cost</b>	<b>119.0</b>		<b>4 fk.</b>	<b>6.0</b>	<b>155.80</b>	<b>10.38</b>
<b>Total labor and field power</b>	<b>158.1</b>	<b>5.5</b>	<b>4.0</b>	<b>6.0</b>	<b>360.02</b>	<b>24.00</b>
Power to pump 1 acre foot of Irrigation water, 300 ft. head					11.70	
Commercial fertilizer					10.00	
Spray materials, total all kinds and purposes					63.00	
Miscellaneous other materials					6.00	
<b>Total material cost</b>					<b>90.70</b>	<b>6.05</b>
<b>Total labor and material cost</b>					<b>450.72</b>	<b>30.05</b>
General expense, office, car, etc. estimated at 5% of above					22.54	
County taxes, land and trees \$30, equipment 5.00					35.00	
Repairs not covered by hourly rates for machines					5.00	
Insurance, compensation \$10.00, Soc. S. 3.00, Other 1.00					14.00	
<b>Total cash overhead costs</b>					<b>76.54</b>	<b>5.10</b>
<b>Total cash costs</b>					<b>527.26</b>	<b>35.15</b>
Investment overhead is based on use of equipment on 50 acres.	Original Cost 50 A.	Av. Value	6% Int.	Depreciation		
		Dollars per acre				
Trees - Cost \$800 A. to develop	40,000	400.00	24.00	20.00		
Building, for equipment	4,000	40.00	2.40	3.20		
Irrigation system and pipe	12,000	120.00	7.20	13.00		
Tillage equipment	1,000	10.00	.60	2.00		
Sprayer	6,000	60.00	3.60	8.00		
Tractors, Truck, Fork-lift, Pick-up	20,000	200.00	12.00	26.70		
Bins, props, and miscel.	20,000	200.00	12.00	24.00		
Land	60,000	1200.00	72.00	---		
<b>Total investment and depr.</b>	<b>163,000</b>	<b>2230.00</b>		<b>96.90</b>	<b>96.90</b>	<b>6.46</b>
<b>Total cash and depreciation costs</b>					<b>624.16</b>	<b>41.61</b>
Interest on investment			133.80		133.80	8.92
<b>Total all costs</b>					<b>757.96</b>	<b>50.53</b>

Labor costs above are figured at the following hourly rates: tractor and truck driver, \$1.50, other labor \$1.25, 30 hp. crawler tractor \$1.50, 30 horsepower wheel tractor \$1.25, fork-lift \$1.00, 2-ton truck, \$1.80 and air carrier sprayer \$2.00. These equipment rates are cash costs only, composed of fuel, repairs and; in the case of the truck, license, and insurance. Depreciation and interest on investment on all equipment is covered in the latter part of the table. Average value on which interest is charged is half of the original cost for depreciable items. Equipment overhead is spread over 50 acres. This could be all apples or several crops or part outside contract work.