

SAMPLE COSTS TO PRODUCE NAVEL ORANGES  
TULARE COUNTY, 1970\*

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<u>Pre-harvest Cash Cultural Costs</u>	<u>Cost Per Acre</u>
Irrigation	
Labor: 14 hours - pull hoses	\$ 28
Water: 2½ ac. ft. @ \$12 + \$6 asses.	36
Spraying (labor and materials)	
Insects & mites - 3 times + 1 air	80
Disease - 1 time	20
Growth regulators* - (¼ acreage per year)	9
Fertilization (include micro material & leaf analysis)	20
Weed Control - L/M (soil management)	24
Prune, sucker & brush disposal* (yearly average)	16
Frost protection* - (wind machines on ½ acreage \$14) labor \$5	19
Drive row maintenance	3
Misc. (tree care, replacement, etc.) labor & equip. \$28	
materials \$12	40
Subtotal:	\$ 295
 <u>Cash Overhead</u>	
Taxes	64
Maintenance & repair, except tractor & wind machine	15
General expense (office, phone, production credit, etc.)	26
Management charge	--
Subtotal:	\$ 105
TOTAL PRE-HARVEST CASH COST	\$ 400
 <u>Investment Overhead</u>	
Depreciation*	115
TOTAL PRE-HARVEST CASH COST PLUS DEPRECIATION	\$ 515
Interest on investment*	189
TOTAL PRE-HARVEST COST	\$ 704

\* Footnotes - see reverse side.

COST PER FIELD BOX AT VARYING YIELDS

Yield: field boxes per acre	200	300	400	500	600
On tree cash cost	\$2.00	\$1.33	\$1.00	\$ .80	\$ .67
Total on tree cost	\$3.52	\$2.34	\$1.76	\$1.41	\$1.17

1969 NAVEL ORANGE PRODUCTION MANAGEMENT - TULARE COUNTY

This example of growing costs for navel oranges is calculated from the following assumptions: The farm is owner-operated, 40 acres of navel oranges. It is located in a good citrus area. Frost hazard is moderate with 100 hours of frost protection required each winter. The cultural practices are for a grove with better-than-average yield of 500 boxes per acre. Capitalization values are \$1200 for land plus \$2200 tree development costs per acre. These figures reflect agricultural values and not market prices which include alternate investment purposes.

Cultural costs itemized include labor at \$2.00 per hour, inc. compensation and Social Security. Wind machine operating costs at \$2.75/hr. inc. fuel, upkeep and repairs. Weed sprayer with tractor operating costs at \$2/hr. No provision is made for value of supervision or management.

The grove is in an irrigation district receiving CVP water at \$12/ac. ft. plus a \$6 assessment. The distribution is by 10-day dragline sprinkler system installed for \$252 per acre. The season requires 14 cycles, 1 man hr/acre. The method of soil management is non-tillage, fall soil sterilant spray and three spot sprayings with oil during the rest of the season.

The pest control problem includes thrips, mites, scale and brown rot. The mites require a separate fall treatment prior to the bordeaux-whitewash spray. A growth regulator spray is applied to one-fourth the grove (late picks) but charged to entire acreage of oranges.

Frost protection is by two wind machines covering half the acreage (late picks), but costs are prorated over the 40 acres of oranges.

Nutrition program is nitrogen applied according to leaf analysis information. Zinc is applied in one of the pest control sprays.

A light pruning is done every fifth year, prorated at 20% of the cost each year.

Depreciation and interest on capital assets are calculated for 40 acres. Wind machines serve half the acreage, but overhead is spread over all the citrus acreage. Interest at 7% on one-half cost, except land.

Picking of fruit is done by the packinghouse and charges deducted at that point. This example is for on-tree expenses up to harvesting. Harvesting costs per field box (1969-70) were about 33¢ picking labor, 9¢ hauling and 11¢ overhead for all harvest operations.

Investment, Depreciation and Interest Schedule (per acre):

	<u>Investment</u>		<u>Depreciation</u>	<u>Interest</u>
	<u>Original Cost</u>	<u>Average Value</u>		
Land	\$1200	\$1200	\$ --	\$ 84
Tree development costs	2200	1100	55	77
Irrigation system	252	126	21	9
Buildings & equipment	250	125	24	9
Wind machines	300	150	15	10
	<u>\$4202</u>	<u>\$2701</u>	<u>\$115</u>	<u>\$189</u>

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