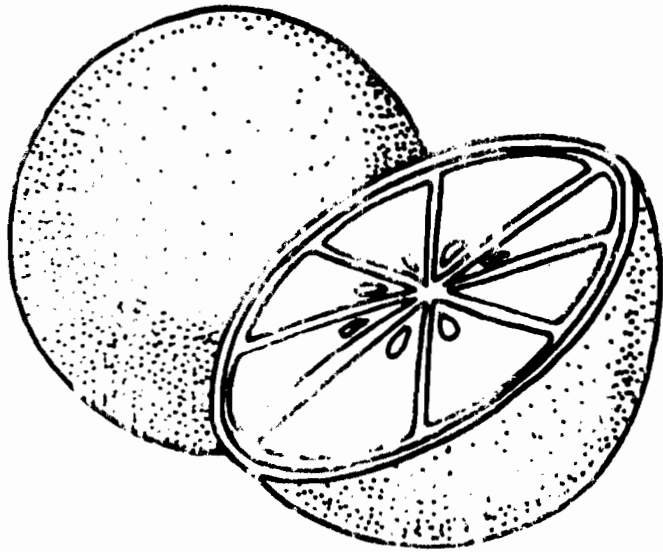


SAMPLE PRODUCTION  
COSTS FOR  
NAVEL ORANGES

IN



GLENN COUNTY

1986

1986  
SAMPLE PRODUCTION COSTS FOR NAVAL ORANGES  
Glenn County  
by  
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and  
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Costs given in this sample study are for those of a typical well managed orchard and are not intended to reflect an average of all orchards in Glenn County.

This study is based on a 20 acre block with 90 trees per acre and a spacing of 22' x 22'.

Practices listed are based on those considered typical production procedures. Sample costs given for labor, materials, equipment and contract services are based on 1986 figures. Some costs or practices listed in this study may not be applicable to your situation. The study is intended as a guide only.

COST ASSUMPTIONS:

1. The study is based on a 20 acre plot, 90 trees/acre, spaced at 22' x 22'.
2. A flood irrigation system is used at a cost of \$200/acre. Water costs are calculated on the basis of \$10/ac.ft. for district water. Growers using well water should use \$20/ac.ft.
3. Mites are treated for once every two years. As a result, 50% of the acreage is assumed to be treated each year. In the cost study, the cost per treated acre is given and then multiplied by the percentage of the acreage treated to give the average cost per acre.

Bordeaux spray is used to control Brown Rot and Citrus Blast. 2,4-D, to prevent fruit drop, is applied with the Bordeaux spray on 50% of the acreage each year.

4. Soil Sterilant: 4 lbs. Krovar per acre @ \$9/lb is used for weed control.
5. A foliar spray with Zn, Mn and K is applied with the Thrip spray.
6. Pruning, sucker and brush disposal is done on 1/3 of the acreage each year.
7. The value of the trees is assumed to be \$2,000/acre with a life span of 30 years.
8. Land is valued at \$1,500/acre, land tax being \$15 and county tax being \$26.78 (1% of land + equipment costs).
9. Picking and hauling is contracted @ \$18/bin.
10. In allocating the equipment costs per acre, the following calculations were made: (a) "Original Cost" of equipment is the new cost including sales tax. (b) "Depreciation" is the new cost per acre divided by the years of life. The new cost per acre is figured as the new cost divided by the acres the equipment will be used on. (c) "Interest" on investment is figured as one-half of the new cost per acre multiplied by the interest rate. One-half of the new cost is the average value of the equipment during its useful life. (d) The Investment per acre used in the cost study is calculated at 60% of the depreciation and interest costs for all new equipment to reflect a mix of the new and used equipment.

A ranging analysis is included in this study to show net profit and losses for varying yields and prices received. In the analysis, the yield range is 15 to 40 bins/acre. 1 bin = 23.5 cases, at 38 lbs. each. In a good year, 20 out of the 23.5 cases, or 85%, are marketable. The remaining 15% is cullage. Prices range from \$50 to \$120/bin. Packing charges and cullage are already deducted and prices/bin reflect those received by the grower.

NAVEL ORANGE PRODUCTION COSTS  
Glenn County - 1986

Labor \$5.00 per hr  
Yield 30 bins/acre

	Hours Per acre	Cash Costs Per Labor cost	Fuel & Repair	Treated Acre Material Costs	% Of Acreage Treated	Average Cost/ Acre*
<b>Pre-Harvest Costs:</b>						
Irrigate, 3 ac.ft./acre of District water @ \$10/ac.ft.	\$6.00	\$30.00		\$30.00	100%	\$60.00
Pest and Disease control						
Thrips - 2x	1.50	7.50	\$13.20	15.00	100	35.70
Red scale	1.00	5.00	8.80	35.00	100	48.80
Mites	.34	1.70	2.89	30.00	50	17.30
Bordeaux spray to prevent Brown rot & citrus blast	1.00	5.00	8.80	30.00	100	43.80
24D to prevent fruit drop				8.00	50	4.00
Weed control						
Soil sterilant, 4 lbs Krovar	.33	1.65	1.42	36.00	100	39.07
Post emergent	.33	1.65	1.42	10.00	100	13.07
Fertilizer, Nitrogen	.25	1.25	.95	50.00	100	52.20
Foliar spray (applied with Thrips)				20.00	100	20.00
Prune, sucker, brush disposal	18.00	90.00			33	30.00
Misc labor, materials					100	40.00
Interest on operating costs						50.49
<b>TOTAL PRE-HARVEST COSTS</b>	<b>\$28.75</b>	<b>\$143.75</b>	<b>\$37.48</b>	<b>\$264.00</b>		<b>\$454.42</b>
<b>Harvesting Costs:</b>						
Picking and hauling: \$18/bin						540.00
<b>TOTAL HARVEST COSTS</b>						<b>\$540.00</b>
<b>Overhead costs</b>						
County taxes						26.78
Office and business costs						43.00
<b>TOTAL OVERHEAD COSTS</b>						<b>\$69.78</b>
<b>TOTAL CASH COSTS</b>						<b>\$1,064.21</b>
<b>TOTAL CASH COSTS PER BIN</b>						<b>\$35.47</b>
<b>Investment costs:</b>						
		Depreciation		Interest @ 13.5%		
Land \$1500/acre				202.50		202.50
Trees, \$2000 30 yr life		66.67		135.00		201.67
Buildings, equipment, well and irrigation system		107.08		79.54		186.62
<b>TOTAL DEPRECIATION AND INTEREST</b>		<b>\$173.75</b>		<b>\$417.04</b>		<b>\$590.79</b>
<b>TOTAL COST PER ACRE</b>						<b>\$1,655.00</b>
<b>TOTAL COST PER BIN</b>						<b>\$55.17</b>

\* The cost per treated acre is multiplied by the percentage of acres treated to give the average cost of the treated and untreated acres.

COST OF PRODUCING NAVEL ORANGES AT VARYING YIELDS

Total yield	BINS PER ACRE					
	15	20	25	30	35	40
Cultural costs	\$454.42	\$454.42	\$454.42	\$454.42	\$454.42	\$454.42
Harvest cost	270.00	360.00	450.00	540.00	630.00	720.00
Cash overhead	69.78	69.78	69.78	69.78	69.78	69.78
Total cash cost	\$794.20	\$884.20	\$974.20	\$1,064.20	\$1,154.20	\$1,244.20
Investment cost	\$590.79	\$590.79	\$590.79	\$590.79	\$590.79	\$590.79
Total cost	\$1,384.99	\$1,474.99	\$1,564.99	\$1,654.99	\$1,744.99	\$1,834.99

Income above Cash Costs at Varying Yields and Prices

Total Yield	BINS PER ACRE					
	15	20	25	30	35	40
\$/bin*						
50.00	\$-44.20	\$115.80	\$275.80	\$435.80	\$595.80	\$755.80
80.00	405.80	715.80	1,025.80	1,335.80	1,645.80	\$1,955.80
100.00	705.80	1,115.80	1,525.80	1,935.80	2,345.80	2,755.80
120.00	1,005.80	1,515.80	2,025.80	2,535.80	3,045.80	3,555.80

Income Above Total Costs at Varying Yields and Prices

Total Yield	BINS PER ACRE					
	15	20	25	30	35	40
\$/bin*						
\$50.00	\$-634.99	\$-474.99	\$-314.99	\$-154.99	\$5.01	\$165.01
80.00	-184.99	125.01	435.01	745.01	1,055.01	1,365.01
100.00	115.01	525.01	935.01	1,345.01	1,755.01	2,165.01
120.00	415.01	925.01	1,435.01	1,945.01	2,455.01	2,965.01

\* Packing charge has been deducted from price received.

NAVEL ORANGE EQUIPMENT AND BUILDING LIST  
Glenn County - 1986

ITEM	ORIGINAL COST	ANNUAL USE (ACRES)	COST PER ACRE	LIFE (YRS)	OVERHEAD DEPREC- IATION	INTEREST @ 13.5%	FUEL & REPAIR COST/HR
50-60 HP Wheel Tractor	\$14,000	20	\$700	10	\$70.00	\$47.25	\$3.80
PTO orchard sprayer	12,000	20	600	15	40.00	40.50	5.00
Weed sprayer	2,000	20	100	10	10.00	6.75	.50
Forklift (used or rented)	1,000	20	50	10	5.00	3.38	
6 ladders @ \$100 ea	600	20	30	5	6.00	2.03	
Picking bags 12 @ \$20 each	240	20	12	5	2.40	.81	
Clippers 24 @ \$10 each	240	20	12	5	2.40	.81	
Pickup (20% for farm use)	10,000	100	100	5	20.00	6.75	
Building- shop, storage etc	2,000	20	100	30	3.33	6.75	
200 gal fuel tank	200	20	10	10	1.00	.68	
Misc shop tools	1,000	20	50	10	5.00	3.38	
Irrigation- flood system	4,000	20	200	15	13.33	13.50	
<b>TOTAL COST</b>	<b>\$47,280</b>		<b>\$1,964</b>		<b>\$178.47</b>	<b>\$132.57</b>	
<b>60% OF NEW COSTS</b>	<b>\$28,368</b>		<b>\$1,178</b>		<b>\$107.08</b>	<b>\$79.54</b>	

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