

WALNUT PRODUCTION COSTS IN STANISLAUS COUNTY

*Prun*  
76

Cost Analysis Work Sheet - 1976

Tillage Practices in Soil Management

Costs are based on production from an 80-acre orchard with 10-year-old trees planted 48 per acre, producing 3500 lbs. of dry nuts. Skilled labor \$4.10 per hour cost to the grower and other labor \$3.50 per hour. Medium wheel tractor per hour cash costs \$2.60, depreciation \$1.65 and interest \$.82.

Preharvest Cash Costs	Sample Costs		My Costs	
	per acre	per 100 lbs. nuts	per acre	per 100 lbs. nuts
Pruning: 10 hrs. labor	\$35.00			
Brush disposal: 3 hrs. labor & 1 tractor hr.	13.70			
Fertilizer: 210 lbs. N @ 22¢ applied	46.20			
Spray materials	50.00			
Spray application 2x: 800 gal. @ 3½¢	28.00			
Tillage and harvest preparation:				
5 hrs. labor and tractor	33.50			
Irrigation 5x: 5 hrs. labor	17.50			
Water: 4 ac. ft. plus district tax	12.15			
Misc. labor: 6 hrs. labor, 1 hr. tractor	24.20			
Misc. materials	19.00			
County taxes	75.00			
Repairs except tractor	14.00			
Office and business costs	38.37			
<b>TOTAL PREHARVEST CASH COSTS</b>	<b>\$406.62</b>	<b>\$11.62</b>		
<b>Harvest Costs:</b>				
Shake, pick, hull, dehydrate & haul: \$155/Ton	\$271.25			
<b>TOTAL HARVEST COSTS</b>	<b>\$271.25</b>	<b>\$ 7.75</b>		
<b>TOTAL CASH COSTS</b>	<b>\$677.87</b>	<b>\$19.37</b>		
<b>Depreciation:</b>				
Irrigation system: \$200 cost - 12 years	\$16.67			
Buildings & equipment: \$120 cost - 12 years	10.00			
Tractor: 7 hrs. @ \$1.65	11.55			
Trees: \$3200 cost - 40 years	80.00			
<b>TOTAL DEPRECIATION</b>	<b>\$118.22</b>	<b>\$ 3.38</b>		
<b>Interest on Investment at 8%:</b>				
Irrigation system: ½ cost (\$100)	\$ 8.00			
Buildings and equipment: ½ cost (\$60)	4.80			
Tractor: 7 hrs. @ 82¢	5.74			
Trees: ½ Cost (\$1600)	128.00			
Land: \$1900	152.00			
<b>TOTAL INTEREST ON INVESTMENT</b>	<b>\$298.54</b>	<b>\$ 8.53</b>		
<b>TOTAL COST OF PRODUCTION</b>	<b>\$1094.63</b>	<b>\$31.28</b>		

SAMPLE COSTS PER 100 LBS. DRY NUTS AT VARYING YIELDS

Yield: lbs. dry nuts per acre	2500	3000	3500	4000	4500
Cash Costs per cwt.	\$24.01	\$21.30	\$19.37	\$17.92	\$16.79
Total Costs per cwt.	\$40.68	\$35.20	\$31.28	\$28.33	\$26.05

WALNUT PRODUCTION COSTS IN STANISLAUS COUNTY

Cost Analysis Work Sheet - 1976

NonTillage Practices in Soil Management

Costs are based on production from an 80-acre orchard with 10-year-old trees, planted 48 per acre, producing 3500 lbs. of dry nuts. Skilled labor \$4.10 per hour cost to the grower and other labor \$3.50 per hour. Medium wheel tractor per hour cash costs \$2.60, depreciation \$1.65 and interest \$.82.

Preharvest Cash Costs	Sample Costs		My Costs	
	per acre	per 100 lbs. nuts	per acre	per 100 lbs. nuts
Pruning: 10 hrs. labor	\$35.00			
Brush disposal: 3 hrs. labor & 1 tractor hr.	13.70			
Fertilizer: 210 lbs. N @ 22¢ applied	46.20			
Spray materials	50.00			
Spray application 2x: 800 gal. @ 3½¢	28.00			
Mow centers 2½ hrs. man and tractor	16.75			
Herbicide: custom applied	7.50			
Irrigate 5x: 1½ hrs. labor	5.25			
Water: 4 ac. ft. plus district tax and \$7.50 per acre pumping cost	19.65			
Misc. labor: 6 hrs. labor, 1 hr. tractor	24.20			
Misc. materials	19.00			
County taxes	75.00			
Repairs, except tractor	11.00			
Office and business costs	37.35			
<b>TOTAL PREHARVEST CASH COSTS</b>	<b>\$388.60</b>	<b>\$11.10</b>		
<b>Harvest Costs:</b>				
Shake, pick, hull, dehydrate & haul: \$155/Ton	\$271.25			
<b>TOTAL HARVEST COSTS</b>	<b>\$271.25</b>	<b>\$ 7.75</b>		
<b>TOTAL CASH COSTS</b>	<b>\$659.85</b>	<b>\$18.85</b>		
<b>Depreciation:</b>				
Irrigation system: \$600 - 12 years	\$50.00			
Buildings & equipment: \$120 - 12 years	10.00			
Tractor: 4½ hrs. at \$1.65	7.43			
Trees: \$3200 cost - 40 years	80.00			
<b>TOTAL DEPRECIATION</b>	<b>\$147.43</b>	<b>\$ 4.21</b>		
<b>Interest on Investment at 8%:</b>				
Irrigation system: ½ cost (\$300)	\$24.00			
Buildings & equipment: ½ cost (\$60)	4.80			
Tractor: 4½ hrs. @ 82¢	3.69			
Trees: ½ cost (\$1600)	128.00			
Land: \$1900	152.00			
<b>TOTAL INTEREST ON INVESTMENT</b>	<b>\$312.49</b>	<b>\$ 8.93</b>		
<b>TOTAL COST OF PRODUCTION</b>	<b>\$1,119.77</b>	<b>\$31.99</b>		

SAMPLE COSTS PER 100 LBS. DRY NUTS AT VARYING YIELDS

Yield: lbs. dry nuts per acre	2500	3000	3500	4000	4500
Cash Costs per cwt.	\$23.29	\$20.70	\$18.85	\$17.46	\$16.39
Total Costs per cwt.	\$41.69	\$36.03	\$31.99	\$28.96	\$26.61

WALNUTS 1976

Monthly Cash Cost Flow

OPERATION	TOTAL	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
<u>Cultural Costs</u>													
Prune	\$ 35.00			17.50	17.50								
Brush disposal	13.70				13.70								
Fertilize	46.20			46.20									
Spray: 4X	78.00							40.00		38.00			
Cultivate and harvest preparation	33.50						3.37	3.37	3.37	3.37	20.00		
Irrigate: 5X	29.65						5.93	5.93	5.93	5.93	5.93		
Misc. including weed control	43.20	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	10.20	3.00
<u>HARVEST COSTS</u>	271.25											150.00	121.25
<u>CASH OVERHEAD</u>													
Off., operating cap.	38.37	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
Taxes	75.00		37.50				37.50						
Repairs	14.00	3.50	3.50	3.50	3.50								
<u>TOTAL CASH COSTS</u>	677.87	9.70	47.20	73.40	40.90	6.20	53.00	55.50	15.50	53.50	32.13	163.40	127.45
<u>ACCUMULATED CASH COSTS</u>			56.90	130.30	171.20	177.40	230.40	285.90	301.40	354.90	387.03	550.43	677.87

UNIVERSITY OF CALIFORNIA  
COOPERATIVE EXTENSION

Lonnie C. Hendricks, Farm Advisor

Edward Yeary, Statewide Farm Advisor

INVESTMENT FOR 80-ACRE WALNUT ORCHARD  
Stanislaus County - 1976

ITEM	PER ACRE	COST		LIFE	DEPRECIATION PER YEAR	OPERATING COST PER HOUR
			TOTAL			
Land: 80 acres	\$2,200		\$176,000			
Trees: 80 acres	3,660		292,800	40	\$ 7,320	
Irrigation system	200		16,000	12	1,333	
Buildings	120		9,600	12	800	
Huller & building	438		35,000	15	2,333	
<b>TOTAL, Land, Trees, Buildings</b>	<b>\$6,618</b>		<b>\$529,400</b>		<b>\$11,786</b>	
<b>Equipment:</b>						
Pickup	\$ 63		\$ 5,000	5	\$ 1,000	7.1¢/mile
Tractor W.D. 60	175		14,000	10	1,400	\$2.60
Pruning equipment	19		1,500	10	150	.15
Trailer	10		800	16	50	.20
Disc 12'	30		2,400	10	240	1.10
Furrower	10		800	10	80	.40
Orchard roller	38		3,000	20	150	.40
Shaker	250		20,000	5	4,000	3.75
Rake	36		2,900	5	580	1.60
Pickup machine	250		20,000	5	4,000	6.10
Carts (2)	18		1,400	10	140	.06
Misc.	31		2,500	10	250	
<b>TOTAL EQUIPMENT</b>	<b>\$ 930</b>		<b>\$ 74,300</b>		<b>\$12,040</b>	
<b>TOTAL INVESTMENT &amp; DEPR.</b>	<b>\$7,548</b>		<b>\$603,700</b>		<b>\$23,826</b>	
<b>Depreciation per acre</b>					<b>\$ 298</b>	
<b>Interest per acre @ 8%</b>	<b>\$ 604</b>					

*Strickland Co.* 1976  
**ENGLISH WALNUT ORCHARD ESTABLISHMENT COSTS**

**COST ANALYSIS WORKSHEET - 1976**

Sample costs to establish a walnut orchard, planted 48 trees per acre.

	COSTS PER ACRE					
	1st Year	2nd Year	3rd Year	4th Year	5th Year 500	6th Year 1,000
<b>Yield: Lbs. per acre</b>						
<b>PRE-HARVEST CASH COSTS:</b>						
<b>Land Preparation:</b>						
Subsoil - contract	80.00					
Tillage - 4 hrs.	26.80					
<b>Trees: 48 @ \$4.50 plus 2</b>	216.00					
in second year		9.00				
<b>Survey &amp; plants: 50¢/tree.</b>	24.00					
\$2.00 ea. second year		4.00				
<b>Stakes: 75c</b>	36.00					
<b>Prune and tie</b>	21.00	21.00	24.00	26.00	28.00	35.00
<b>Brush disposal</b>				10.20	13.70	13.70
<b>Fertilizer applied</b>			2.64	5.28	10.56	21.12
<b>Sunburn protection</b>	10.50					
<b>Spray materials</b>			15.00	15.00	25.00	25.00
<b>Spray application</b>			10.50	10.50	21.00	21.00
<b>Cultivate: 3 hrs.</b>	20.10	20.10	20.10	20.10	20.10	20.10
<b>Irrigate: labor, 5 hrs.</b>	17.50	17.50	17.50	17.50	17.50	17.50
<b>Water</b>	7.50	7.50	10.00	10.00	10.00	10.00
<b>Misc. labor, power, materials</b>	36.00	25.00	25.00	25.00	25.00	25.00
<b>Taxes</b>	38.00	38.00	38.00	38.00	50.00	65.00
<b>Repairs</b>	20.00	14.00	14.00	14.00	14.00	14.00
<b>Office &amp; business costs</b>	33.20	9.36	10.60	11.50	17.38	21.65
<b>TOTAL PRE-HARVEST CASH COSTS</b>	<b>586.60</b>	<b>165.46</b>	<b>187.34</b>	<b>203.08</b>	<b>252.24</b>	<b>289.07</b>
<b>HARVEST COSTS:</b>						
<b>Land Preparation</b>					15.90	15.90
<b>Shake, pick, hull, dry and haul, \$155/ton</b>					38.75	77.50
<b>TOTAL HARVEST COSTS</b>					<b>54.65</b>	<b>93.40</b>
<b>TOTAL CASH COSTS</b>					<b>306.89</b>	<b>382.47</b>
<b>DEPRECIATION:</b>						
<b>Irrigation system: \$200 cost, 12 years</b>	16.67	16.67	16.67	16.67	16.67	16.67
<b>Buildings &amp; equipment: \$120 cost, 12 years</b>	10.00	10.00	10.00	10.00	10.00	10.00
<b>Tractor: \$1.65 per hour</b>	16.50	9.90	9.90	9.90	16.50	16.50
<b>TOTAL DEPRECIATION</b>	<b>43.17</b>	<b>36.57</b>	<b>36.57</b>	<b>36.57</b>	<b>43.17</b>	<b>43.17</b>
<b>INTEREST ON INVESTMENT 8%:</b>						
<b>Irrigation System: ½ cost, \$100</b>	8.00	8.00	8.00	8.00	8.00	8.00
<b>Buildings &amp; equipment: ½ cost, \$60</b>	4.80	4.80	4.80	4.80	4.80	4.80
<b>Tractor: 82¢ per hour</b>	8.20	4.92	4.92	4.92	8.20	8.20
<b>Land: \$2200</b>	176.00	176.00	176.00	176.00	176.00	176.00
<b>Interest on accumulated costs</b>		66.14	103.09	144.75	191.00	241.24
<b>TOTAL INTEREST ON INVESTMENT</b>	<b>197.00</b>	<b>259.86</b>	<b>296.81</b>	<b>338.47</b>	<b>388.00</b>	<b>438.24</b>
<b>TOTAL COST FOR THE YEAR</b>	<b>826.77</b>	<b>461.89</b>	<b>520.72</b>	<b>578.12</b>	<b>738.06</b>	<b>863.88</b>
<b>CREDIT FOR CROP: 22¢/lb.</b>					110.00	220.00
<b>NET COST FOR THE YEAR</b>	<b>826.77</b>	<b>461.89</b>	<b>520.72</b>	<b>578.12</b>	<b>628.06</b>	<b>643.88</b>
<b>ACCUMULATED COST PER ACRE</b>	<b>826.77</b>	<b>1288.66</b>	<b>1809.38</b>	<b>2387.50</b>	<b>3015.56</b>	<b>3659.44</b>