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THE AGRICULTURAL EXTENSION SERVICE
University of California
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County of Lake

SAMPLE COST ANALYSIS FOR PRODUCING BARTLETT PEARS IN LAKE COUNTY

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COSTS - This analysis has been prepared from a recent survey of representative pear growers. The cost figures are typical of well managed local orchards under present conditions rather than average or actual. Its purpose is to aid producers in studying their own operations and management practices.

IRRIGATION - Pears can be profitably grown on our best deep soils without irrigation, but yields are lower than in irrigated orchards. In general, growers are irrigating their orchards wherever water is available. Irrigation is essential for profitable operation on the shallow soils.

SPRAYING - Recent years have brought rapid changes in pest and disease control materials and methods of application. Two applications of DDT spray now provide good control of codling moth. There has been an increase in the use of commercial spray equipment such as the speed sprayer, naconizer, airplane, and helicopter.

Multiple applications of copper dusts or dilute sprays to the bloom have reduced the spread of pear blight, and hormone spray has increased yield of merchantable fruit by preventing drop.

OUTLOOK - Pear prices have been good in recent years, except in 1949 when a very large crop resulted in low prices. Total acreage in Bartlett pears in the west is considered adequate to produce a supply that will bring a fairly profitable price in years of average production and normal purchasing power.

Any decline in consumer purchasing power will result in a greater decline in grower prices and profits, with continuing high costs of transportation, processing, and marketing. High production per acre at low costs and financial reserves are essential to security.

Bartlett pears are the leading fruit crop in Lake County in value of product, although exceeded in acreage planted by walnuts. The climate and soil here favor the production of high quality shipping and canning pears. Spring frosts occasionally damage and reduce the crop, and growers in some areas are equipped with orchard heaters or wind machines to prevent frost injury.

Bearing acreage of Bartletts is now about 3,550 acres, while there are 450 acres of young non-bearing trees. This present total of 4,000 acres is much less than the total acreage in the 1930's when there were about 6,500 acres. Most of the best orchards remain and have increased production with age, so the total production in the county has increased from 23,000 tons in the thirties to about 33,000 tons per year. In 1950 the yield was 34,000 tons, worth about \$80.00 per ton.

(over)

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Sample Inputs and Costs for Producing Bartlett Pears in Lake County
With a Yield of 12 Tons per Acre

	Hours per acre			Cost per acre	Cost per ton	
	Man labor	20 h.p. tractor	1½ ton truck			
Pruning 75 trees per acre @ 75¢	50			\$56.25		
Brush disposal, large limbs only	2		1	4.30		
Blight inspection & cutting, av.	20			20.00		
Dusting for blight, 6 @ \$1.50	(contract)			9.00		
Spraying 6 times @ \$4.00	(contract)			24.00		
Cultiv. & ridging for irrig. (panels)	6	6		18.00		
Irrigation, 4 times	10			10.00		
Miscel. other cultural labor	6	1	1	10.30		
Total cultural labor	94			\$151.85	\$12.65	
Picking including supervision @ 528 boxes @ 20¢	105			105.60	8.80	
Hauling boxes and fruit	13		9	33.70	2.81	
Total labor cost	212	7	11	\$291.15	\$24.26	
Irrigation water - power for pumping 20 acre inches				6.00		
Spray materials and dust				42.85		
Misc., fertilizer, replants, etc.				10.00		
Total material cost				\$58.85	\$4.90	
General expense, 5% of above				17.50		
County taxes				24.00		
Repairs to equipment				4.00		
Comp. & Soc. Sec. Ins. on hired labor, 140 hours				5.00		
Total cash overhead costs				\$50.50	\$4.21	
Total cash costs				\$400.50	\$33.37	
Investment overhead based on 20-acre orchard	20 acre unit	Orig. cost	Av. value	5% Int.	Depreciation	
			Dollars per acre			
Trees, cost to bearing	\$12,000	\$600	\$300	\$15.00	\$15.00	
Building for equipment	1,600	80	40	2.00	2.00	
Labor camp facilities	800	40	20	1.00	3.00	
Irrigation pump & pipe	3,200	160	80	4.00	8.00	
Tillage equipment	600	30	15	.75	2.00	
Misc. ladders, bags, etc.	1,000	50	25	1.25	10.00	
Land	8,000	400	400	20.00		
Total investment	\$27,200	\$1360	\$880			
Total depreciation					\$40.00	\$40.00
Total interest on investment				\$44.00		\$44.00
Total all costs						\$484.50

Labor costs above are figured at the piece or contract rates shown or at \$1.00 per hour for man labor, \$2.00 per hour for 20 h.p. tractor, and \$2.30 per hour for 1½ ton truck. A working operator on 20 acres would do about 72 hours of the labor shown and would hire the other 140 hours. An owned tractor and truck are assumed, and the above rates include overhead as well as direct operating costs. Spraying and dusting are assumed to be hired on a contract basis.

The above costs are a sample only and should be used mainly as a guide in figuring and comparing your own costs with operations and materials needed in your orchards and with actual yields.