COSTS TO PRODUCE BARTLETT PEARS IN PLACER COUNTY 1972

Orchard: 40 acres, trees spaced 20'x20'.
Yield: 8 to 15 tons/acre; price about $100 per ton.
Labor: Skilled @ $2.25 per hour. Unskilled $1.85 incl. S.S. & W.C.I.

<table>
<thead>
<tr>
<th>Cultural</th>
<th>Hours Per Acre</th>
<th>Cash &amp; Labor Cost Per Acre</th>
<th>Total Costs Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prune</td>
<td>62.5</td>
<td>115.63</td>
<td>115.63</td>
</tr>
<tr>
<td>Brush</td>
<td>2.0</td>
<td>4.50</td>
<td>6.00</td>
</tr>
<tr>
<td>Fertilize</td>
<td>0.5</td>
<td>1.13</td>
<td>1.00</td>
</tr>
<tr>
<td>Spray 8X</td>
<td>8.0</td>
<td>16.00</td>
<td>25.20</td>
</tr>
<tr>
<td>Dust 3X @ 0.4</td>
<td>1.2</td>
<td>2.70</td>
<td>1.50</td>
</tr>
<tr>
<td>Cultivation:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disk 2X, mow 4X</td>
<td>4.0</td>
<td>9.00</td>
<td>6.40</td>
</tr>
<tr>
<td>Irrigate 11X</td>
<td>16.0</td>
<td>29.60</td>
<td>57.10</td>
</tr>
<tr>
<td>Prop, wire or tie</td>
<td>6.0</td>
<td>11.10</td>
<td>5.70</td>
</tr>
<tr>
<td>Total Cultural</td>
<td>100.2</td>
<td>191.66</td>
<td>41.30</td>
</tr>
</tbody>
</table>

Total Harvest (pick, haul, supervise) bins: 10 tons @ $15.00 per ton 150.00

Cash Overhead
- Misc. office, insurance, interest on operating capital, etc. 30.35
- Taxes* 30.00

Total Cash Overhead: 60.35

Total Cash Cost
- (8 tons/A) 534.33
- (15 tons/A) 645.63
- (10 tons/A) 566.14

Management 5% of 10 tons @ $100 per ton = $1000 gross income per acre 50.00

Investment Per Acre Annual Cost
- Depreciation Interest
Land 600.00 36.00
Trees 900.00 36 yrs = 25.00 27.00
Irrigation 150.00 15 yrs = 10.00 4.50
Shed, labor house 167.00 20 yrs = 8.35 5.00
Tractor & Equip. 412.00 48.60 12.35
Drainage 50.00 1.67 1.50 (overhead)

2279.00 93.62 86.35 179.97

Yield in tons per acre 8 10 15
Total Cost per ton $94.29 $79.61 $60.04
Total Cost per acre $754.30 $796.11 $900.00
Gross income @ $100/T $800.00 $1000.00 $1500.00

John J. Smith, Farm Advisor & Phil Parsons, Extension Economist

*Note: Taxes will be influenced by sales of adjoining parcels for homesites, and orchard yield records.
SAMPLE PRODUCTION COSTS

PEAR PRODUCTION, PLACER COUNTY 1972

BARTLETT Pears continue to be a 1,000 acre industry for Placer County. Fresh shipments of about 1/2 the crop, and cannery contracts for the balance brought $600,000 gross income in 1971. HARDY and WINTER NELIS are similar in production costs but bring lower prices and in years of heavy crop, may have no market.

Marketing: through local fruit sheds, about 50% shipped fresh, 50% to canneries, a growing tonnage at farm roadside stands.

ORIENTAL SALAD PEARS are a specialty crop in small plantings, as are Early Bartletts (Dr. Jules Guyot). Both are very susceptible to Bacterial Fire Blight. All the above mentioned varieties are now considered desirable for crosspollination of Bartletts to increase crop in years when bloom period is cold or wet. Pollinating varieties that bloom at the same time as Bartlett are grafted or planted about every fourth tree every fourth row.

To rehabilitate Bartlett pear blocks and increase yield per acre so as to obtain gross income above costs, a practice of "double planting in the rows" is recommended. Decline trees, Grade #3 or worse, with little or no new growth should be replaced, and in addition, new trees are placed between trees, resulting in 10' x 20' spacing.

Double planting does not increase cost of operation per acre except cost of the new trees, planting, and annual pruning cost.

Test plots indicate desirable rootstocks are Calleryana, Winter Nelia, Bartlett self-rooted, Betulaefolia. Mature trees on Calleryana roots at Auburn survived pear decline better and are larger than adjacent trees with domestic french roots.

Irrigation by sprinklers, 1/8" nozzles, 11 hour sets, repeated at 12 to 20 day intervals, is most common. Interval (tensiometers helpful) depends on soil depth, day length and high temperature, July water management being most critical for these reasons and for optimum fruit sizing.

Strip weed sprays in tree rows reduce root competition and total number of times crossing rows with tractor equipment.

Fertilization at 100 pounds N per acre is recommended for January or February application in mature orchards.

All labor (except harvest) in this study is considered to be hired at $1.85 for unskilled labor and $2.25 per hour for tractor, truck drivers and supervisory labor, including Social Security, etc. Rent should be charged for on-farm housing.

Note: The value of one acre of trees used in this cost study for Placer County's existing orchards represents about 50% of the state-wide figure of developing a new orchard 5 years of age. Also about 20% of the trees are missing or non-bearing replants.

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