

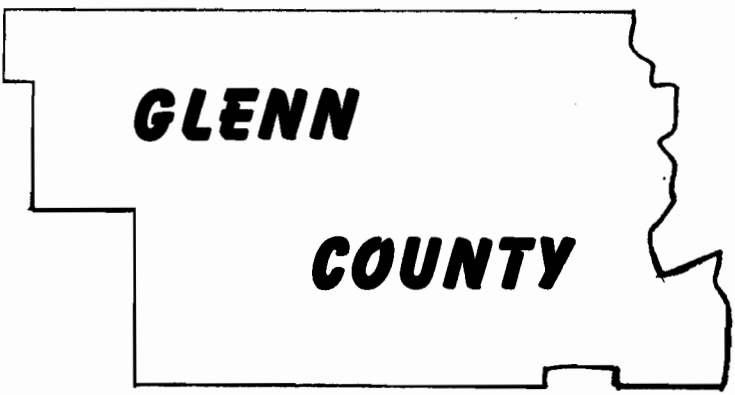
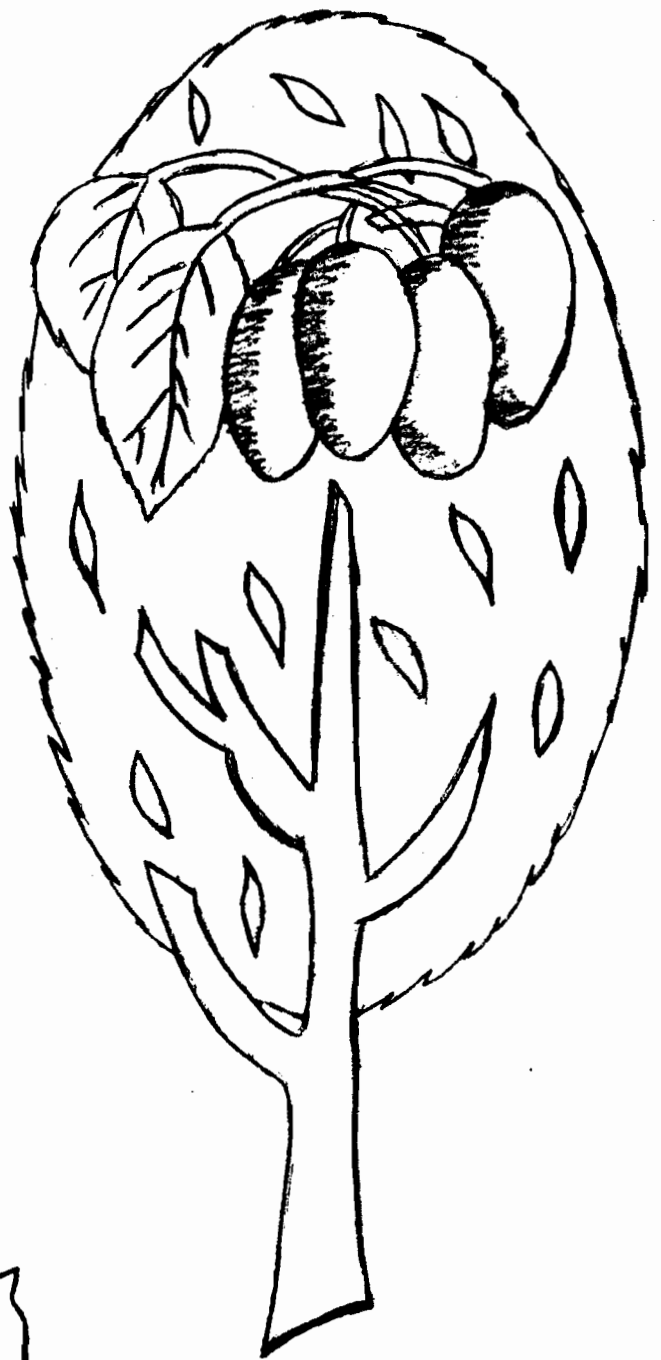
*W. Reed*

**SAMPLE COSTS**

**TO PRODUCE PRUNES**

**NON-TILLAGE**

**IN**



UNIVERSITY OF CALIFORNIA  
AGRICULTURAL EXTENSION SERVICE  
ORLAND, CALIFORNIA

This Cost Study has been compiled by:

Roy B. Jeter  
Farm Advisor  
Glenn County  
Cooperative Extension Service

and

A. D. Reed  
Extension Economist  
University of California  
Davis, California

Farm Advisor's Office  
Glenn County

August 1975  
250 copies

*"The University of California's Agricultural  
Extension programs are available to all, with-  
out regard to race, color, or national origin."*

Co-operative Extension Work in Agriculture and Home Economics, U.S. Department  
of Agriculture, University of California and County of Glenn co-operating

BASIS FOR COST OF PRODUCING PRUNES  
UNDER GLENN COUNTY CONDITIONS

This cost study is based upon information gathered from several Glenn County operations. The data should be used only as a guide for planning or evaluating your own operation.

All labor is shown as contract at either \$3.00 skilled or \$2.50 unskilled per hour (including Social Security, Workmens Compensation Insurance and other minor costs). Operators performing their own labor or hiring non-contract labor should reduce the labor costs shown by an appropriate amount. It should be remembered that all contract labor in a cost study represents actual costs plus a profit to the contractor.

The equipment investment is based upon new cost. It should be realized that many operators own and maintain equipment which has been partially or completely depreciated. In such cases, proper adjustments should be made in depreciation and interest costs. Such savings are not reflected in the study.

Cultural costs as shown are based upon maximum recommended requirements. It is recognized that in a given year it may not be necessary for all practices (pest control, etc.) to be performed.

Chopping orchard weed growth is now used by the majority of prune growers. Orchards where non-tillage is practiced will benefit by "working up" the orchard floor every few years. This prevents dense sod formation and on some soil types aids water penetration.

Fertilizer programs are not constant on a year to year basis. Amounts of "N" may be reduced in years of light crop. Potassium Sulfate (potash) is recommended at high levels, usually 15 to 20 pounds per tree. A band injection applied application at these rates should last 3 to 4 years before retreatment is necessary, depending on crop yields and soil type. Leaf analysis and tree condition will indicate the potassium level in trees.

The number of pest sprays may vary from orchard to orchard. Mites may become a summer pest problem, especially in cultivated orchards. This cost study allows for three seasonal sprays. Summer showers can stimulate fruit rot and leaf rust. Such situations might require pre-harvest fruit spray or dusting. Fruit rot control by sprays or dusts have not proven satisfactory to date.

The investment shown for trees reflects input costs covering those years up to self-sustaining production. Interest on investment costs represents 8 percent on the average value of all depreciable items. Land does not depreciate; therefore, interest is computed on the full value.

Land taxes are calculated by multiplying the market value by twenty-five percent times the tax rate. Taxes on depreciable property is allowed in the miscellaneous cost.

\*Dry fruit handling cost includes an additional cost to growers that is highly variable from year to year. It includes such items as industry assessment per dry ton, a set aside of crop some years that cannot be marketed; off grade dried fruit may grade undersize and be declared unsalable. All of these costs are assessed to the grower and must be considered as cost against the processed crop on a year-to-year basis.

Note the blank column on the right margin. This is for your use in comparing your costs with the sample costs. It is suggested that growers acquire a copy from your farm advisor each year and keep an annual production cost record.

SAMPLE COSTS TO PRODUCE PRUNES - NON-TILLAGE  
Glenn County  
August 1975

Labor including fringe costs:  
Skilled - \$3.00/hour  
Unskilled - \$2.50/hour

Production data: 3 dry tons/acre (3.2:1 ratio) of 70/80 size. 120 trees/acre. 100 acre units

Operation	Hours per acre	Cash and labor cost per acre			Total	Cost per ton	Your cost
		Labor	Fuel & Repairs	Materials Kind and quantity cost			
<b>Cultural Costs</b>							
Prune 120 trees @ .70		\$ 84.00			\$ 84.00		
Chop or remove brush	2.5	7.50	\$ 6.56		14.06		
Spray 3X (dormant, fungus, lacy scab)	1.0	3.00	8.40	Pesticides \$ 37.60	49.00		
Fertilize				Nitrogen (1.5 lbs N/tree x 120) 180 lbs/ac @ 31¢ + \$1.50 applic. 57.30	57.30		
				Potash (potassium sulfate) 20 lbs/tree every 5 yrs 480 lbs/ac/yr @ 7¢ and applic. 37.60	37.60		
Chop 6X	1.5	4.50	3.96		8.46		
Irrigate 6X	6.0	15.00	3.50	2½ ac ft @ \$3.25 = 8.13	26.63		
Tree replacement	2.0	6.00		Trees 1/ac @ 1.45	7.45		
Tying and/or lop pruning, weed control, etc.	6.0	15.00	1.50	Misc. supplies, herbicides, ties, etc. 2.50	19.00		
<b>TOTAL CULTURAL COSTS</b>		<b>\$135.00</b>	<b>\$23.92</b>	<b>\$144.58</b>	<b>\$303.50</b>	<b>\$101.17</b>	
<b>Harvest Costs</b>							
Harvest (contract) 9.6 green tons @ \$20.00				\$192.00	\$192.00		
Field bin handling & haul to dryer 9.6 green tons/ac x \$3.50				33.60	33.60		
Field bin rental @ \$4.50/bin - \$4.50 x 1.5 bins/ac				6.75	6.75		
Dehydrator (contract) 9.6 green tons @ \$25.00 x 9.6 green tons				240.00	240.00		
Dry fruit handling cost* (refer to narrative)							
<b>TOTAL HARVEST COSTS</b>				<b>\$472.35</b>	<b>\$472.35</b>	<b>\$157.45</b>	
<b>Cash Overhead</b>							
Misc., office, interest of operating capital, etc.				46.55	46.55		
6% x above costs (\$303.50 + \$472.35)				19.80	19.80		
Taxes & insurance (\$800 x 25% x 9.9 rate)							
<b>TOTAL CASH OVERHEAD</b>				<b>\$ 66.35</b>	<b>\$ 66.35</b>	<b>\$ 22.12</b>	
<b>TOTAL CASH COST</b>		<b>\$135.00</b>	<b>\$23.92</b>	<b>\$683.28</b>	<b>\$842.20</b>	<b>\$280.74</b>	
Management 5% of 3.0 tons @ \$350.00					52.50	\$ 17.50	
<b>Annual Cost</b>							
<b>INVESTMENT</b>	<b>Per Acre</b>			<b>Depreciation</b>	<b>Interest: 8%</b>		
Land	\$ 800.00			---	\$ 64.00		
Trees	2200.00			\$ 88.00	88.00		
Irrigation system	250.00			12.50	10.00		
Buildings	55.00			2.75	2.20		
Equipment	312.00			31.20	12.48		
<b>Total</b>	<b>\$3617.00</b>			<b>\$134.45</b>	<b>\$176.68</b>	<b>\$311.13</b>	<b>\$103.71</b>
<b>TOTAL COST PER ACRE</b>						<b>\$1205.83</b>	<b>\$401.95</b>
<b>Cost per ton at varying yields</b>							
Yield - tons per acre	2	3	4				
Cost per ton	\$510.72	\$401.94	\$346.06				

## EQUIPMENT INVESTMENT FOR PRUNES

Glenn County  
August 1975

Based on 100 acres of prunes  
(120 trees per acre)

Item	Cost	Annual use (acres)	Cost per acre	Life (Yrs.)	Depreciation	8% Interest	Cash costs per hour		
							Fuel	Repairs	Total
Tractor W.D. 45 H.P.	\$ 7,500	100	\$ 75.00	10	\$ 7.50	\$ 3.00	\$ .56	\$ 1.19	\$ 1.75
Tractor W.D. 35 H.P.	6,500	100	65.00	10	6.50	2.60	.37	.95	1.32
Sprayer P.T.O.	4,800	100	48.00	10	4.80	1.92	---	4.81	4.81
Chopper 10' P.T.O.	2,500	100	25.00	10	2.50	1.00	---	.88	.88
Disc 8'	1,100	100	11.00	10	1.10	.44	---	.88	.88
Ridger	500	100	5.00	15	.50	.20	---	.44	.44
Tool bar	250	100	2.50	15	.25	.10	---	.18	.18
Springtooth 11'	1,600	100	16.00	10	1.60	.64	---	.96	.96
Truck 2 T. (1/2 share)	4,000	100	40.00	10	4.00	1.60			
Pickup (1/2 share)	2,500	100	25.00	10	2.50	1.00			
<b>Total</b>	<b>\$31,250</b>	<b>xxx</b>	<b>\$312.50</b>	<b>xx</b>	<b>\$31.25</b>	<b>\$12.50</b>			

MONTHLY CASH FLOW FOR PRUNES

Glenn County  
August 1975

Operation	Total	Month											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Cultural Costs													
Prune	\$ 84.00	\$42.00	\$ 42.00	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Brush removal	14.06		7.03	7.03									
Spray 3X	49.00	16.33			16.33		16.33						
Fertilize													
Nitrogen	57.30		57.30										
Potash	37.60										37.60		
Chop 6X	8.46			1.41	1.41	1.41	1.41	1.41	1.41				
Irrigate 6X	26.63				4.43	4.44	4.44	4.44	4.44	4.44			
Tree replacement	7.45		7.45										
Tying and/or lop pruning, misc.	19.00		6.33					6.34	6.33				
<b>Total</b>	<b>\$303.50</b>												
Harvest Costs													
Harvest	472.35								472.35				
<b>Total</b>	<b>472.35</b>												
Cash Overhead													
Miscellaneous	46.55	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.87
Taxes & insurance	19.80				9.90								9.90
<b>Total</b>	<b>66.35</b>												
<b>TOTAL CASH COST</b>	<b>\$842.20</b>	<b>\$62.21</b>	<b>\$123.99</b>	<b>\$12.32</b>	<b>\$35.95</b>	<b>\$ 9.73</b>	<b>\$26.07</b>	<b>\$16.07</b>	<b>\$488.41</b>	<b>\$ 8.32</b>	<b>\$41.48</b>	<b>\$ 3.88</b>	<b>\$13.77</b>

The following University of California Agricultural Extension publications on prunes and other deciduous fruit trees are available at your local farm advisor's office.

- OSA-133 2432      ALTERNATE MIDDLE IRRIGATION OF ORCHARDS -  
Describes method to conserve water.
- C 486 2433      ESSENTIALS OF IRRIGATION AND CULTIVATION OF ORCHARDS -  
Principles of good soil and water management.
- B 826 1825      MECHANICAL HARVESTING EQUIPMENT FOR DECIDUOUS FRUIT TREES -  
Tree shakers, pickup machines and catching frames in common use  
on deciduous tree fruits and nuts.
- OSA-n72 2434      PERENNIAL MORNING-GLORY CONTROL IN VINEYARDS AND ORCHARDS -  
Control by subsurface layering of herbicides.
- AXT-n70 2435      A PERMANENT SPRINKLER SYSTEM FOR DECIDUOUS ORCHARDS AND VINEYARDS
- OSA-n13 2436      PLANT YOUR ORCHARD RIGHT -  
Major decisions about site, preparation, rootstocks and varieties,  
planting distances, and training.
- OSA-180 2437      PLANTING LAYOUTS FOR DECIDUOUS ORCHARDS
- OSA-n34 2367      PRUNING EQUIPMENT SELECTION -  
Briefly describes and compares electrical, hydraulic, and  
pneumatic pruning equipment.
- AXT-159 2461      PRUNE PRODUCTION