

# WALNUT COST STUDY



Compiled by

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# S T A N I S L A U S     C O U N T Y

## INTRODUCTION

The Agricultural Extension Service has been cooperating with a number of walnut growers in Stanislaus County during the last three years in keeping records and summarizing the cost of production of walnuts. The following report presents a summary of the cost of production, yield, income, and cultural operations for the 19 walnut growers, who cooperated in the cost study during the 1952 year.

The county yield of the 1952 walnut crop was slightly less than the 1951 yield. However, the total tonnage was increased because of the production of new orchards coming into bearing. With the rapid increase in acreage, Stanislaus County is destined to be one of the leading walnut producing counties in the state in the near future. At the present time, Stanislaus County rates fourth in production in the state.

The average 1952 walnut price amounted to just a little more than 22 cents per pound with the quality of the nuts not being too good this season. A warm spell which occurred in September caused considerable damage to the quality of the crop. There were about 5% more culls in the 1952 crop than there were in the 1951 crop, due primarily to climatic conditions.

The figures shown in this cost study indicate that the total income per acre amounts to \$451.83 per acre on an average. Whereas, the total all costs increased to \$215.73, leaving a management income of \$236.10 per acre. The labor costs amount to just slightly less than half of the total all costs or a figure of \$100.88. The net returns have gradually increased each year during the last three years of the study.

The growers who have acted as cooperators in the study should not be considered average growers because their yields have been higher than the county yield as a whole. The 19 growers in the study had a total average yield of 2119 pounds per acre; whereas, the average county yield for 1952 was only 1442 pounds per acre. Yields from orchards in the study varied from slightly less than 1/2 ton per acre to approximately 2 tons per acre in the best orchard.

A similar cost study was carried on in Stanislaus County during the years 1930-35. This report represents the third year of the second study which is now being carried on. It is planned that the cost study will be carried on for two more years in order to have a five-year summary covering the years 1950-55, representing a period which is 20 years later than the original cost study.

The Extension Service wishes to extend thanks to the growers who furnished the information; also to the Modesto branch of the California Walnut Growers Association who cooperated in furnishing yield and grade sheets for the individual growers in the study.

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EXPLANATION OF TERMS USED IN THIS REPORT

Labor Costs: Includes hired labor, value of operator's labor at going wage rates and use of tractors and trucks charged at an hourly rate to cover operating and overhead costs. Where contract work is reported, such as for spraying or hulling and dehydrating, overhead costs on equipment and facilities are usually covered.

Material Costs: Includes water costs (pumping power, irrigation district tax, if any, or water purchased), pest and disease control materials, fertilizer and covercrop seed.

Cash Overhead Costs: Includes all cash costs not reported under labor and material costs except interest paid on mortgaged indebtedness. Principal items covered by this classification of costs are general expense, county taxes, compensation and other insurance, and repairs on facilities and equipment other than tractors and trucks. The general expense item is calculated at 5% of total labor and material cost and covers such miscellaneous cash costs as interest on operating capital, office expenses and use of family car in conjunction with the enterprise.

Depreciation: That portion of the original cost of facilities and equipment which is chargeable to current year's operations. Depreciation on tractors and trucks is included in the hourly rate charged in the labor record for their use and, therefore, is excluded from total depreciation costs shown in the tables. Depreciation on trees of \$13.75 per acre is based upon an estimated original cost of establishing the orchard of \$550 per acre and a productive life of 40 years. Tree depreciation was figured the same for all orchards.

Interest on Investment: This cost is computed at 5% of the average value of facilities and equipment. Average values, except for land, are figured at one-half of the original cost or replacement cost as the case may be. Land values are based upon estimated long-term agricultural values. Average tree values were figured the same for all orchards at \$275 (1/2 of \$550 estimated original cost). Interest on investment in tractors and trucks is excluded from the total interest charge in the tables for the reason explained under "Depreciation."

Total Cost: Includes all of the above costs.

Total Income and Average Price All Nuts: Includes total cash returns plus deferred payments such as revolving funds and operating margins or gains.

Management Income: Total income less total cost. If total cost exceeds total income a minus (-) management income is shown.

## STANISLAUS COUNTY 1952 WALNUT MANAGEMENT STUDY

## DISCUSSION OF TABLES

Table 1

Cooperators in this 1952 study showed a slightly higher management income per acre on the average than in 1951, although the average price received for all nuts was a little lower. A higher average yield per acre this year, coupled with a slight reduction in total cost per acre, accounted for this situation. The increased yield over 1951 was approximately 9%, which is about the same proportionate increase as occurred for the state as a whole in 1952. There was considerable variation in the profitableness of individual orchards in this year's study, however. Management income ranged from \$445.90 down to a loss of \$7.60. Table 1 gives a general picture of the factors which accounted for such differences in net incomes.

The averages shown for cooperators in this study should not be considered representative of the industry either in the county or state as a whole, since the orchards involved are considered above the average. This is evident by the fact that the average yield per acre of these orchards (2,119 lbs.) was nearly 50% above the county average yield (1,442 lbs.) and almost two-thirds higher than the state average yield (about 1,295 lbs.) in 1952.

Records are arranged in Table 1, as well as in succeeding tables, in order of decreasing management income per acre, as shown in the extreme right column.

Total cost of production for those in the study this year ranged from \$138.84 to \$325.53. This wide range can be attributed to many variable production costs, some of which were exceptionally high for some growers. It is believed that some operators could increase their efficiency by reducing certain costs and thus improve their net earnings. Although the average total cost per acre was slightly lower for all orchards in the study this year than in 1951, this cannot be attributed to a reduction in prices paid by growers for labor and materials. Some of the difference between the two years may be due to the fact that all of the same orchards are not included in the study both years.

Orchard No. 14 was again the most profitable one in the study, as in 1951 when it was pointed out that this was a relatively small block of Eureka's of less than 5 acres. The exceptionally high yield as shown by this orchard in the past two years is seldom experienced in the larger orchards that would be considered a minimum-sized walnut farm. No. 10 was the least profitable orchard in this year's study, due mainly to the relatively low yield per acre. This orchard was mainly Mayettes.

TABLE I - SUMMARY OF COSTS, INCOME AND EARNINGS PER ACRE - 1952

Record number	Main Varieties 1/	Aver. age trees	Size of orchard 2/	Yield lbs. per acre	Aver. price all nuts	Total income per acre	Costs per Acre						Management income per A.
							Total labor	Total material	Cash overhead	Depreciation	Interest	Total	
14	E	24	A	3841	19.27	740.12	122.02	84.97	24.33	21.92	40.98	294.22	445.90
32	F,M,B	20	B	2716	22.93	622.96	132.38	24.67	22.39	15.64	34.22	229.30	393.66
2	E,P,F	27	A	3031	19.11	579.12	96.27	21.74	18.62	32.83	42.91	212.37	366.75
4	F	28	A	2620	22.71	595.02	131.24	24.58	21.43	18.48	41.36	237.09	357.93
13	E,M,P	32	B	3074	21.17	650.66	134.91	43.36	33.52	44.81	49.29	305.89	344.77
26	P,E,H,F	20	C	2321	21.87	507.69	63.38	22.16	14.72	30.35	37.52	168.13	339.56
1	F,E	26	B	2294	23.08	529.46	83.53	23.01	21.62	28.25	46.84	203.25	326.21
5	P,E,F,M	18	B	2663	20.48	545.32	118.85	19.71	22.87	24.26	42.49	228.18	317.14
18	E,F	19	A	2508	19.72	494.72	94.42	13.92	16.08	19.40	38.30	182.12	312.60
24	E,P	26	A	2656	21.16	562.02	146.01	7.64	25.85	51.50	47.27	278.27	283.75
15	P,C,G	22	B	2404	21.29	511.79	151.64	49.83	26.50	35.04	46.42	309.43	202.36
16	F,E,P,G	34	C	1731	21.47	371.74	70.06	22.87	16.83	28.71	37.85	176.32	195.42
19	E	26	A	2352	21.00	493.99	211.71	1.50	29.36	33.93	49.03	325.53	168.46
22	F,M	25	B	1571	22.75	357.58	90.68	30.97	19.74	19.58	35.87	196.84	160.74
17	H,M,E	10	B	1079	22.53	243.07	52.72	13.71	20.54	16.85	35.02	138.84	104.23
31	E,P,M	20	B	1601	18.83	301.48	132.22	3.24	20.41	14.87	36.58	207.32	94.16
23	P,C,F	27	A	2273	15.41	350.19	168.63	24.43	22.27	24.00	41.95	281.28	68.91
29	P,M	22	B	1352	21.76	294.05	152.46	29.64	20.79	33.81	42.64	279.34	14.71
10	M,B,F	22	B	910	23.21	211.29	119.68	24.34	22.71	19.48	32.68	218.89	-7.60
High 10	-	23	21.8 Ac.	2596	21.50	558.04	97.93	25.72	21.29	31.32	41.89	218.15	339.89
Low 9	-	27	29.0 Ac.	1721	21.09	362.97	103.35	24.44	20.03	26.81	39.07	213.70	149.27
1952 Av.	-	25	25.2 Ac.	2119	21.32	451.83	100.88	25.02	20.60	28.87	40.36	215.73	236.10
1951 Av.	-	25	28.4 Ac.	1938	22.93	444.47	107.32	27.40	21.80	27.63	40.06	224.21	220.26
1950 Av.	-	23	28.6 Ac.	1860	20.49	381.11	102.89	25.82	20.72	27.43	40.79	217.65	163.46

1/ F-Franquette; P-Payne; M-Mayette; E-Eureka; C-Concord; H-Hartley; G-Grove; B-Blackmer

2/ A - under 15 acres; B - 15-40 acres; C - over 40 acres.

Table 2

Cost per hundredweight varied greatly between individual orchards in this study, as will be noted in Table 2. Yield per acre was the most important factor influencing these costs. It will be noted that total cost of production ranged from about 7 cents per pound to over 24 cents per pound for those in the study. On the average, the total cost of \$10.18 per hundredweight in 1952 was about 1-1/3 cents per pound less than the average for 1951. This was due mainly to the higher average yield.

Although the average price for merchantable nuts in 1952 was slightly above 1951, the average received for all nuts was a little over 1½ cents per pound less, due to the larger percentage of culls, as will be seen in Table 3. It should be pointed out that at the time this report was prepared final returns on the 1952 crop for members of the Walnut Growers Association had not been completed so that the prices shown here are the best estimates that could be made at the time as to what these figures would be.

Wide variation in harvesting costs per hundredweight existed in the 1952 study. Some of these variations can be attributed to differences in yields, while others can be attributed to more efficient harvesting methods. Many factors have a bearing on harvesting costs. A College of Agriculture publication has been issued on Walnut Harvesting, which is available at the farm advisor's office.

Mechanical picking was used to a greater extent in 1952 than in 1951 and probably has a bearing on the slightly lower knocking, picking, and hauling out costs per hundredweight in 1952 than in 1951; however, the overhead costs of interest and depreciation for those who owned their own pickers, as well as other harvesting facilities, are not included in the total harvesting costs shown in Table 2. The interest and depreciation on this equipment can be obtained from Tables 5 and 6 and added to the total harvesting figure to obtain the over-all harvesting cost picture. For all records, the interest and depreciation on harvesting, hulling, and drying equipment averaged 55 cents per hundredweight, which would bring total over-all harvesting costs to \$3.73 per hundredweight.

TABLE 2 - SUMMARY OF COSTS, INCOME AND EARNINGS PER HUNDREDWEIGHT - 1952

Record number	Yield lbs. per acre	Costs per Hundredweight									Aver. price merch.	Aver. price all nuts	Management income per cwt.
		Knock, pick, haul out	Hull, dry, del.	Total harvest*	Cul-tural labor	Cul-tural mater'l	Cash over-head	Depre-ciation	Inter-est	Total cost			
14	3841	1.83	.63	2.46	.72	2.21	.63	.57	1.07	7.66	24.10	19.27	11.61
32	2716	2.77	1.43	4.20	.67	.91	.82	.58	1.26	8.44	25.75	22.93	14.49
2	3031	2.33	.20	2.53	.65	.72	.61	1.08	1.42	7.01	23.75	19.11	12.10
4	2620	2.24	1.38	3.62	1.39	.94	.82	.70	1.58	9.05	24.03	22.71	13.66
13	3074	2.31	.88	3.19	1.20	1.41	1.09	1.46	1.60	9.95	24.01	21.17	11.22
26	2321	1.27	.53	1.80	.93	.96	.63	1.31	1.61	7.24	24.54	21.87	14.63
1	2294	2.69	.46	3.15	.50	1.00	.94	1.23	2.04	8.86	25.67	23.08	14.22
5	2663	2.10	.48	2.58	1.88	.74	.86	.91	1.60	8.57	24.28	20.48	11.91
18	2508	1.68	1.49	3.17	.60	.55	.64	.77	1.53	7.26	23.14	19.72	12.46
24	2656	2.57	.96	3.53	1.96	.29	.98	1.94	1.78	10.48	25.03	21.16	10.68
15	2404	3.49	.66	4.15	2.16	2.07	1.10	1.46	1.93	12.87	24.15	21.29	8.42
16	1731	1.83	.43	2.26	1.79	1.32	.97	1.66	2.18	10.18	24.64	21.47	11.29
19	2352	3.55	1.40	4.95	4.05	.06	1.25	1.44	2.09	13.84	-----	21.00	7.16
22	1571	2.50	1.26	3.76	2.01	1.97	1.26	1.24	2.28	12.52	24.94	22.75	10.23
17	1079	2.82	1.13	3.95	.94	1.27	1.90	1.56	3.25	12.87	25.31	22.53	9.66
31	1601	4.94	1.65	6.59	1.67	.20	1.27	.93	2.29	12.95	23.65	18.83	5.88
23	2273	4.64	1.67	6.31	1.10	1.08	.98	1.06	1.85	12.38	-----	15.41	3.03
29	1352	3.81	1.77	5.58	5.70	2.19	1.54	2.50	3.16	20.67	25.00	21.76	1.09
10	910	6.04	1.75	7.79	5.36	2.67	2.50	2.14	3.59	24.05	25.35	23.22	-.83
High 10	2596	2.01	.69	2.70	1.07	.99	.82	1.21	1.61	8.40	24.54	21.50	13.10
Low 9	1721	2.90	.87	3.77	2.24	1.42	1.16	1.56	2.27	12.42	24.58	21.09	8.67
1952 Av	2119	2.40	.78	3.18	1.58	1.18	.97	1.36	1.91	10.18	24.56	21.32	11.14
1951 Av	1938	2.86	.77	3.63	1.91	1.41	1.12	1.43	2.07	11.57	24.31	22.93	11.36
1950 Av	1860	2.82	.77	3.59	1.94	1.39	1.11	1.48	2.19	11.70	22.24	20.49	8.79

\*Excludes depreciation, interest and repairs on owned equipment.



Table 3

This table presents an analysis of grades and sizes for orchards in this study which marketed their nuts through the Walnut Growers Association. It will be seen that quality can affect returns considerably. The average price received for all nuts ranged from \$18.83 up to \$23.08, except for No. 23 which received a very low price of only \$15.31. Even the difference between \$23.08 and \$18.83 per hundredweight is equal to  $4\frac{1}{4}$  cents per pound, which, if applied to the average yield per acre for all orchards, amounts to approximately \$90 per acre difference in income.

The 1952 crop in general was quite a bit below average in quality for orchards in the study, which was also the situation for the industry as a whole. The percentage of culls was up considerably from 1951. Size distribution, however, for those in the study was not a great deal different than the previous year.

TABLE 3 - GRADE AND SIZE DISTRIBUTION, - AVERAGE FOR ALL VARIETIES - 1952

Record number	Merchantable Grades - Per cent of Total Yield						Per cent culls	Per cent blows	Per cent of Merchantable			Av. price per cwt.
	Diamond		Emerald		All merch. babies	Total merch.			Large	Medium	Small	
	Large	Medium	Large	Medium								
14	.8	1.8	54.5	12.5	6.1	75.7	18.9	5.4	73.0	18.9	8.1	\$19.27
32	63.5	6.1	13.2	.5	3.1	86.4	12.4	1.2	88.7	7.7	3.6	22.93
2	2.7	8.1	45.9	9.5	11.2	77.4	18.4	4.2	62.8	22.8	14.4	19.11
4	16.8	40.3	-----	-----	36.2	93.3	5.4	1.3	18.0	43.2	38.8	22.71
13	23.6	13.8	14.2	15.9	18.2	85.7	10.8	3.5	44.0	34.7	21.3	21.17
26	12.3	1.4	57.1	10.8	5.1	86.7	10.9	2.4	80.0	14.0	6.0	21.87
1	56.1	13.5	9.1	1.1	8.2	88.0	9.3	2.7	74.1	16.5	9.4	23.08
5	11.2	3.6	52.9	7.1	6.6	81.4	14.7	3.9	78.8	13.1	8.1	20.48
18	4.1	5.3	48.8	15.9	8.2	82.3	12.6	5.1	64.2	25.8	10.0	19.72
24	21.9	11.4	23.7	12.2	12.6	81.8	13.3	4.9	55.8	28.8	15.4	21.16
15	22.5	9.3	25.0	15.1	14.4	86.3	11.3	2.4	55.1	28.3	16.6	21.29
16	19.6	12.4	34.0	5.2	13.5	84.7	11.3	4.0	63.3	20.8	15.9	21.47
19	Sold to independent											
22	54.9	20.7	-----	-----	13.7	89.3	9.1	1.6	61.5	23.2	15.3	22.75
17	42.8	2.8	33.8	4.5	2.8	86.7	11.3	2.0	88.3	8.4	3.3	22.53
31	9.9	.5	40.4	15.6	9.6	76.0	16.8	7.2	66.2	21.2	12.6	18.83
23	No breakdown											
29	51.6	2.2	25.8	2.8	2.3	84.7	13.0	2.3	91.4	5.8	2.8	21.76
10	53.2	2.4	31.6	1.1	1.8	90.1	6.9	3.0	94.2	3.9	1.9	23.21
High 10	22.4	7.7	35.8	9.5	9.7	85.1	11.9	3.0	68.3	20.2	11.5	21.50
Low 9	26.2	10.1	29.6	7.2	11.8	84.9	11.5	3.6	65.7	20.4	13.9	21.09
1952 Av.	24.0	8.7	33.2	8.5	10.6	85.0	11.7	3.3	67.3	20.3	12.4	21.32
1951 Av.	55.3	16.1	7.5	1.2	11.2	91.3	7.3	1.4	68.7	19.0	12.3	22.93
1950 Av.	34.4	10.5	28.1	7.0	7.6	87.6	9.9	2.5	71.3	20.0	8.7	20.49

Table 4

This table is presented mainly for use by cooperators in the study in comparing their operational costs with others. Such comparisons may show opportunities where changes might be made in management practices which would increase efficiency of production.

Total labor and material costs for those in the 1952 study ranged from about \$66 to over \$213 per acre. Some operators showed low costs for certain operations but on the other hand had relatively high costs for other operations. Pruning ranged from 0 to about \$41 per acre this year. This cost tends to vary considerably between orchards, depending upon practices as well as age and variety of trees. Some operators undoubtedly must spend more for pruning than others. Also some operators do not expect to do a thorough pruning job every year, and, therefore, one year's cost on an individual orchard may not be representative of the average over a period of years. The wide variation in fertilizing costs indicates that some operators are spending more than is necessary to obtain high yields. Spraying and dusting, of course, varies between orchards, depending upon individual conditions. It appears that some operators were spending more for cultivation, etc., than normally would be required for good orchard management practices.

Harvesting costs make up a relatively large portion of the total cost of production, and it appears that some operators might be able to improve their net incomes by more efficient methods. The advent of the mechanical picker has done considerable in some orchards towards reducing harvesting costs. The figures shown for harvesting in this table do not include overhead costs of interest and depreciation on equipment, which will be found in Tables 5 and 6. Knocking, picking, and hauling out for orchards in this year's study showed a slight reduction from 1951 on the average, but this would be partly offset by the increase in overhead costs on harvesting equipment.

The average operational costs shown at the bottom of the table are based upon the acreage on which such operations were performed. Since all growers did not have costs for all items, the average total labor and material costs, as shown in the extreme right column, are less than the sum of the various items.

TABLE 4 - LABOR AND MATERIAL COSTS PER ACRE - INDIVIDUAL ORCHARDS - 1952

Record number	Prune & brush disposal	Fertilizer & cover crop		Spraying & dusting		Culti- vate, hoe & weed spray	Irrigation		Misc. labor & mate- rial	Total cult'l L. & M.	Knock, pick, haul out	Hull, dry, de- liver	Total labor & mate- rial
		Labor	Material	Labor	Material		Labor	Water (power tax)					
14	12.20	5.17	84.07	-----	-----	6.89	3.15	.90	-----	112.38	70.47	24.14	206.99
32	7.48	1.46	16.34	-----	-----	7.37	2.00	8.33	-----	42.98	75.20	38.87	157.05
2	5.64	1.35	18.47	.74	2.08	10.37	1.53	1.19	-----	41.37	70.89	5.75	118.01
4	-----	1.46	23.19	-----	-----	30.36	4.55	1.39	-----	60.95	58.82	36.05	155.82
13	11.97	1.73	32.94	4.70	10.42	11.60	4.20	-----	2.52	80.08	71.06	27.13	178.27
26	3.15	.56	11.25	-----	-----	10.46	7.35	10.91	-----	43.68	29.43	12.43	85.54
1	2.77	2.89	21.63	-----	-----	4.61	1.15	1.38	-----	34.43	61.69	10.42	106.54
5	12.75	-----	13.65	6.56	4.58	23.04	3.38	1.48	4.27	69.71	55.95	12.90	138.56
18	4.94	1.67	12.81	-----	-----	6.11	2.25	1.11	-----	28.89	42.00	37.45	108.34
24	10.04	4.07	1.80	.29	3.30	30.00	2.13	1.16	7.01	59.80	68.26	25.59	153.65
15	17.40	5.31	29.34	9.65	19.22	17.82	1.84	1.27	-----	101.85	83.86	15.76	201.47
16	9.95	1.19	14.32	5.40	6.84	7.17	6.87	1.54	.57	53.85	31.76	7.32	92.93
19	28.00	-----	-----	26.86	-----	24.75	15.75	1.50	-----	96.86	83.60	32.75	213.21
22	2.16	2.89	26.51	-----	-----	15.77	10.05	4.33	.84	62.55	39.26	19.84	121.65
17	4.29	1.91	12.01	-----	-----	2.78	1.17	1.70	-----	23.86	30.37	12.20	66.43
31	7.58	-----	-----	-----	-----	12.13	5.62	3.00	1.63	29.96	79.10	26.40	135.46
23	7.50	2.00	22.68	-----	-----	13.95	1.64	1.75	-----	49.52	105.52	38.02	193.06
29	41.17	4.31	17.35	.89	2.44	24.08	5.18	9.09	2.14	106.65	51.50	23.95	182.10
10	9.50	1.26	13.57	.94	.31	30.81	6.28	10.46	-----	73.13	54.96	15.93	144.02
High 10	6.74	1.52	17.97	4.23	6.69	12.51	4.47	5.10	3.56	53.44	52.10	18.11	123.65
Low 9	12.46	2.22	17.79	6.39	7.52	12.77	6.04	2.91	.64	62.90	49.94	14.95	127.79
1952 Av.	9.89	1.81	17.87	5.74	7.27	12.65	5.33	3.91	1.50	58.59	50.93	16.38	125.90
1951 Av.	6.65	2.30	17.37	5.80	10.68	14.35	6.60	3.39	6.96	64.39	55.36	14.97	134.72
1950 Av.	9.01	1.37	15.43	6.89	7.60	11.45	7.92	3.73	4.75	61.96	52.34	14.41	128.71

Table 5

Cash overhead costs, as shown in Table 5, include all cash costs not recorded under labor and material. An explanation of the general expense item will be found on the page "Explanation of Terms." Depreciation on trees is calculated the same for all orchards in the study, as will be seen in this table. The \$13.75, which was used, was calculated on the basis of an original cost of establishing the orchard of \$550 per acre and a productive life of 40 years.

As previously mentioned, the harvesting equipment, as well as hulling and drying depreciation cost, can be added to the labor cost for these operations, along with interest on the investment shown in Table 6, in order to obtain total harvesting cost. Depreciation cost for those in the study ranged from about \$15 per acre to a little over \$50 per acre. Averages at the bottom of the table for various items are based upon the acreages reporting costs for such items. Therefore, the total cash overhead and total depreciation costs for the averages are less than a sum of the various items.

TABLE 5 - CASH OVERHEAD AND DEPRECIATION COSTS PER ACRE - 1952

Record number	Cash Overhead Costs per Acre					Depreciation Costs per Acre								
	General expense	County taxes	Repairs 1/	Insurance & other	Total cash over'hd	Trees	Buildings	Irrigation	Tillage equipment	Spray & dust eqt.	Harvest eqt.	Hull & dry eqt.	Misc. equipment	Total depreciation
14	10.35	10.63	1.97	1.38	24.33	13.75	.50	----	1.69	----	3.93	1.97	.08	21.92
32	7.85	5.00	7.67	1.87	22.39	13.75	----	----	1.22	----	.67	----	----	15.64
2	5.91	10.82	1.35	.54	18.62	13.75	----	----	.41	1.00	6.00	11.42	.25	32.83
4	7.79	10.55	----	3.09	21.43	13.75	----	----	3.82	----	----	----	.91	18.48
13	8.91	13.53	9.53	1.55	33.52	13.75	1.33	6.50	1.19	----	2.46	17.12	2.46	44.81
26	4.28	6.56	2.50	1.38	14.72	13.75	.58	4.97	1.65	----	4.35	4.85	.20	30.35
1	5.33	14.56	1.73	----	21.62	13.75	4.33	4.17	.77	----	2.35	2.69	.19	28.25
5	6.93	12.40	1.92	1.62	22.87	13.75	----	1.37	1.62	2.69	1.19	2.64	1.00	24.26
18	5.41	9.78	----	.89	16.08	13.75	----	1.20	.59	1.37	2.22	----	.27	19.40
24	7.68	9.00	9.17	----	25.85	13.75	4.00	----	4.58	4.91	10.78	10.90	2.58	51.50
15	10.07	14.33	.65	1.45	26.50	13.75	1.67	9.25	1.64	3.56	.81	3.74	.62	35.04
16	4.65	7.08	1.67	3.43	16.83	13.75	1.87	2.06	.80	1.46	5.98	2.29	.50	28.71
19	10.66	15.00	----	3.70	29.36	13.75	3.33	6.15	3.70	----	7.00	----	----	33.93
22	6.08	12.37	.26	1.03	19.74	13.75	----	5.16	.67	----	----	----	----	19.58
17	3.32	10.22	5.96	1.04	20.54	13.75	----	1.08	.20	----	1.30	.52	----	16.85
31	6.77	11.91	----	1.73	20.41	13.75	----	----	.89	----	----	----	.23	14.87
23	9.65	9.55	2.32	.75	22.27	13.75	1.17	1.41	1.85	3.50	2.07	----	.25	24.00
29	9.11	9.56	----	2.12	20.79	13.75	1.25	6.00	.64	1.82	10.25	----	.10	33.81
10	7.20	10.99	3.14	1.38	22.71	13.75	----	----	1.17	1.96	.40	2.00	.20	19.48
High 10	6.18	9.85	4.22	1.48	21.29	13.75	1.60	4.55	1.54	2.64	3.46	7.30	.86	31.32
Low 9	6.39	9.71	1.84	2.43	20.03	13.75	1.82	3.72	1.03	1.98	4.73	2.36	.42	26.81
1952 Av.	6.30	9.77	3.02	2.04	20.60	13.75	1.73	4.08	1.26	2.12	4.11	4.90	.63	28.87
1951 Av.	6.73	8.26	4.65	2.16	21.80	13.75	2.71	3.61	1.21	1.65	2.87	3.72	1.03	27.63
1950 Av.	6.44	8.34	4.12	1.82	20.72	13.75	2.36	3.58	1.08	1.49	1.85	5.02	.99	27.43

1/ Excludes tractors and trucks.

Table 6

Average investment, as shown in Table 6, for individual orchards in this year's study is based upon one-half the original cost of the facilities and equipment shown. Land values were figured at what were considered conservative values and somewhat below current selling prices. Therefore, the total investment figures per acre are not representative of the amount of capital required to go into the business of producing walnuts. These values are used merely as a basis for calculating a nominal interest on investment cost as part of the total cost of production.

The investment in tractors and trucks is not shown in this table since the overhead cost of interest and depreciation is included in the hourly rate charged for the use of this equipment in the labor record.

Average costs shown at the bottom of the table are based upon the acreage reporting the various items, and the investment cost per acre for the averages is less than a sum of the various items, since all orchards did not have investment in all items.

TABLE 6 - AVERAGE INVESTMENT PER ACRE - INDIVIDUAL ORCHARDS - 1952

Record number	Trees	Buildings	Irrigation facilities	Tillage equipment	Spray & dust equipment	Harvesting equipment	Hull & dry equipment	Miscellaneous equip.	Land	Total except tractors & trucks
14	275.00	6.25	-----	8.44	-----	19.69	9.84	.39	500.00	819.61
32	275.00	-----	-----	6.08	-----	3.33	-----	-----	400.00	684.41
2	275.00	-----	-----	2.03	6.67	29.00	94.20	1.25	450.00	858.15
4	275.00	-----	-----	47.73	-----	-----	-----	4.54	500.00	827.27
13	275.00	20.00	65.03	5.30	-----	9.23	98.95	12.29	500.00	985.80
26	275.00	8.70	51.14	5.38	-----	21.26	37.82	1.00	350.00	750.30
1	275.00	86.54	83.33	5.77	-----	11.15	24.04	.96	450.00	936.79
5	275.00	-----	33.33	15.42	26.92	7.69	31.35	10.00	450.00	849.71
18	275.00	-----	18.00	3.63	6.84	11.11	-----	1.37	450.00	765.95
24	275.00	20.00	-----	35.00	24.54	49.00	68.50	23.35	450.00	945.39
15	275.00	25.00	70.32	8.18	17.82	3.63	25.34	3.12	500.00	928.41
16	275.00	37.50	27.05	4.00	8.75	27.13	25.00	2.50	350.00	756.93
19	275.00	41.67	76.85	18.52	-----	18.50	-----	-----	550.00	980.54
22	275.00	-----	38.66	3.80	-----	-----	-----	-----	400.00	717.46
17	275.00	-----	16.23	1.00	-----	6.50	1.62	-----	400.00	700.35
31	275.00	-----	-----	5.70	-----	-----	-----	.92	450.00	731.62
23	275.00	31.25	28.13	13.88	26.25	13.24	-----	1.25	450.00	839.00
29	275.00	12.50	75.00	3.18	9.10	27.61	-----	.50	450.00	852.89
10	275.00	-----	-----	5.83	9.78	2.00	10.00	1.00	350.00	653.61
High 10	275.00	25.07	55.42	8.91	20.36	16.45	51.42	5.44	420.32	837.83
Low 9	275.00	32.95	39.39	5.46	11.28	19.56	21.77	2.10	400.97	781.46
1952 Av.	275.00	29.57	46.38	7.04	13.17	18.04	37.02	3.72	409.79	807.14
1951 Av.	275.00	36.18	43.73	6.57	10.69	13.55	35.12	7.04	402.26	801.20
1950 Av.	275.00	31.61	42.90	5.84	9.56	9.56	41.99	6.50	418.85	815.84