# Avocado Growers Compare Production Costs 

## 1932 Costs Were Lower

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Mr. Avocado grower has joined the ranks of his neighbor fruit growers in sharpening his pencil to record the various items of cost involved in the production of the "queen of fruits" and study possible savings and short cuts in the expense of growing. For three years this cost analysis has been under way in cooperation with thirty-two commercial growers and under the direction of the Agricultural Extension Service. The thirty-two orchards are located principally in the Tustin, Yorba Linda and La Habra Heights districts. They represent a fair cross section of the industry in the Orange County and East Whittier districts, varying from 2 acres to 20 acres in size.
"For the purpose of analysis the orchards were divided into two major groups with almost a hundred acres in each. The object of the study initiated by the Avocado Department of the Orange County Farm Bureau are two fold: -first, to establish an authentic source of cost data for the use of the industry in its efforts to maintain some protection against the dumping of foreign fruit in our markets. Second, to provide a standard of efficiency for the individual grower who may desire to compare the efficiency of his cultural practices with that of other growers and groups of growers.

## 1931 and 1932 Compared

"Look how field costs were reduced last year under the year before. Labor costs (including the grower's own labor at going rates of hire) in the mature orchards averaged $\$ 100.00$ per acre in 1931 and $\$ 65.17$ per acre in 1932 , a reduction of 35 per cent. Material costs for 1931 were $\$ 92.54$ per acre and $\$ 55.20$ per acre in 1932, a cut of almost 40 per cent. Other cash costs including taxes and insurance were reduced from $\$ 42.24$ per acre to $\$ 31.89$ per acre. Depreciation, or replacement charge, was about the same- $\$ 54.03$ and $\$ 52.75$ per acre respectively. Interest on the investment at $6 \%$ may be added to total cost of production, or left out, as the individual may choose. This year one is usually glad if he can break even, however, there are many growers who are making or at least endeavoring to make payments on their property, and interest is a real cost in these cases. The interest charge in 1931 was $\$ 222.79$ per acre on the average investment of $\$ 3243.00$ per acre, while in 1932 the interest charge was somewhat lower \$194.64 per acre, due to an agreed arbitrary lowering- of land values twenty-five per cent. If you add the above items for each year you will find the average total cost of producing avocados in 1931 was $\$ 511.64$ per acre and $\$ 399.65$ per acre in 1932.
"The average yields for the two years were 3995 pounds per acre in 1931 and 2192 pounds in 1932.

## Variation in Labor Costs

"In reviewing the labor cost reports for all the growers at the end of the year, we find a great variation in their reported costs for the same item. For instance, in the item of irrigation labor, one grower reported the low cost of $\$ 2.11$ per acre for the year while the highest cost reported was $\$ 37.74$ per acre for the year-a tremendous difference.
"Upon investigation, of course, we learn that the low cost grower had an overhead sprinkling system, while the highest cost grower furrowed out many times and had considerable labor costs. There is room for cutting cost in the latter case. And so did variations show up in other labor items as witness:- applying fertilizer $\$ 0.58$ to $\$ 17.86$ per acre; planting cover crop $\$ .05$ to $\$ 1.07$; pruning $\$ 0.29$ to $\$ 24.86$; bracing $\$ 0.57$ to $\$ 18.04$; cultivation $\$ 2.40$ to $\$ 62.63$, and miscellaneous $\$ 1.11$ to $\$ 8.86$ per acre. The range in total cultural labor costs was $\$ 15.36$ to $\$ 120.48$ per acre. Here is a place for some growers to sit down and use their pencil and do some figuring.
"I have known some successful farmers who preferred to wear out a pencil instead of the cultivator and tractor or team and man.

## Material Costs

"The same story is reflected in recording the material costs, which show a great range again. Irrigation water ranged in cost from $\$ 12.27$ per acre to $\$ 73.80$ per acre; bulky fertilizer $\$ 9.24$ to $\$ 30.05$ per acre; concentrate fertilizer $\$ 0.71$ to $\$ 17.25$ per acre; bracing $\$ 0.64$ to $\$ 5.90$, etc. The total material costs per acre varied from $\$ 21.05$ to $\$ 96.19$. It stands to reason that if the higher brackets of cultural expense, both labor and material costs, are maintained consistently, it will be very difficult for the grower to meet the modest prices and returns that the near future at least has in store for most fruit commodities.

## Make Profits at Home

"The cost studies show definitely that profits can be made at home in the way of reduced costs in many cases. Let's examine a new grouping for comparison of orchard efficiency during the past year. The bearing orchards were divided into groups according to their reported net return. The first half of the bearing orchards showing the higher net returns and the second half showing the lower net returns. The following Table I compares the two groups:

TABLE I

| - | High Profit | Low Profit |
| :---: | :---: | :---: |
| Cultural Costs Per Acre | \$ 37.56 | \$ 53.98 |
| Harvesting Costs Per Acre | 25.73 | 13.59 |
| Material Costs Per Acre. | 51.75 | 57.24 |
| Cash Overhead Costs Per Acre | 23.58 | 36.77 |
| Total Cash Costs Per Acre. | 138.62 | 160.29 |
| Interest and Depreciation Per Acre | 240.96 | 251.17 |
| Total All Costs Per Acre. | 379.58 | 411.46 |
| Total Income Per Acre. | 418.75 | 106.89 |
| Income Over Cash Costs Per Acre | 280.13 | -53.40 |
| Yield Per Acre | 3753 tb | 127315 |
| Average Age of Trees. | 9 Years | 8 years |
| Cash Cost Per Pound. | 3.7c | 12.6 c |

"Notice that the following cost items were lower in the high profit group-cultural expense, material costs, cash, overhead,, total cash costs, interest and depreciation and total all costs. The high profit group produced 3753 pounds of fruit per acre for $\$ 138.62$ cash costs where the low profit group produced 1273 pounds at $\$ 160.29$ per acre. In other words, the high profit group spent $\$ 22.00$ less per acre in actual production cash cost. They saved that much which is equivalent to a profit of $\$ 22.00$ per acre.

## Cultural Costs Compared

"The high and low profit groups were again placed side by side to compare cultural costs, and here is what the analysis disclosed:

| TABLE II |  |  |
| :---: | :---: | :---: |
|  | High Profit | Low Profit |
| Irrigation labor per acre. | \$ 9.81 | \$ 13.09 |
| Water cost per acre. | 37.67 | 44.61 |
| Acre Inches per acre | 19.8 | 15.5 |
| Fertilizer cost per acre. | 15.38 | 13.02 |
| Cultivation per acre. | 13.74 | 21.98 |
| Pruning and bracing per acre | 12.60 | 8.06 |

"The highlights of Table II indicate that money can be saved in irrigation labor. The high profit orchards spent less money for irrigation labor than did the low profit orchards.
"Although the high profit orchards used more water per acre, their water costs were less. This was due to the location of that group in the cheaper water areas-as a matter of fact less boosting or lifting costs were involved.
"The high profit group used more fertilizer materials. Their cultivation expense was almost half of the amount reported by the low profit group. Pruning and bracing costs were higher in the high profit group.

## Costs in Young Orchards

"Much illuminating information was derived from the reports of the young orchards ranging in age from 1 to 4 years.
"Here again there was registered considerable variation in costs for the same item of operation or materials. The average costs in the 17 young orchards were as follows:irrigation labor \$19.15 per acre; spreading fertilizer \$3.97; pruning and bracing \$5.50; cultivation \$15.93; fertilizer materials \$9.82; water cost \$20.53. The average use of irrigation water was 7 acre inches per acre for the young orchards.

## Investment per Acre

"The total investment includes the value of trees, improvements, equipment and land. For the young orchards the average values per acre were as follows:-trees \$872.00; improvements \$78.08; equipment \$6.22, and bare land \$985.21. Average total investment \$1941.51.
"For the bearing orchards the following values were determined as averages per acre:trees \$1607.48; improvements \$238.80; equipment \$88.47; bare land \$1309.21 (depreciated 25 per cent under 1931 value). Average total investment $\$ 3243.96$ per acre.

## Yields Necessary to Pay Costs

"On the basis of the 1932 data compiled from the 32 avocado groves in the Orange County cost analysis, it will require 761 pounds of avocados per acre to pay only the cash costs of $\$ 152.26$ per acre, if the grower received 20 cents per pound for his fruit. At 15 cents it will require 1015 pounds per acre to pay cash costs. At 10 cents 1522 pounds per acre, and at 5 cents 3044, pounds. If interest and depreciation, or replacement charges, are to be included in the cost of production .correspondingly higher yields will be required to balance the cost.
"Profit from skill and management offers an opportunity for the grower to increase his income. He can do this by keeping accurate records which he may analyze and determine where the excessive costs are and make the, necessary cuts and adjustments.

