



Cost of Producing Pears in the Willamette Valley

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Although Oregon State College does not have a cost of production study for Bartlett pears in the Willamette Valley, it does have a detailed study of fruit growers' costs in the Hood River Valley for the period 1947 through 1956. This study is available as Oregon State College Station Bulletin 573, "Cost of Producing Apples and Pears in the Hood River Valley" (Green, Irish, and Mumford) published in May, 1960. Copies may be obtained from Oregon County Extension Agents.

A newcomer to the Bartlett pear business has less managerial ability than an experienced grower. He can read widely, talk to other pear growers, attend educational meetings, and obtain information from other sources. However, to improve his efficiency in pear production, there is no substitute for actually working with pear trees.

This is one reason why a cost study for Hood River must be qualified when applied to other fruit producing districts, including the Willamette Valley. Some growers in the cost study are third-generation pear growers. The reader should assume that they are better than average. However, no one has a monopoly on ideas and efficiency of production. There is always room for the person who can do a better job. Raising Bartlett pears is no exception.

The Hood River study included 22 1/2 individual orchard-year records. Farms averaged about 55 acres in size with about 3 1/2 acres in orchard, including apples, winter pears, and Bartletts.

Growers in Hood River have found that Bartlett pears, winter pears, and apples are complementary crops, primarily because harvest seasons do not overlap seriously. The Hood River study showed that medium sized orchards of 20-39 acres were most efficient, producing fruit at the lowest unit cost.

Whether Bartlett pears are grown in Hood River, or the Willamette Valley, they must compete with other crops for the same land. The Hood River study showed that apples and winter pears are the main competing orchard crops in that area. The same orchard combination is not common in the Willamette Valley. There is not a winter pear business. Although apples are produced commercially, the major outlet is the local fresh market. Cherries, prunes, nuts, and some small fruits may be grown as complementary crops in the Willamette Valley.

A milder climate and higher rainfall allows the production of many more crops, including other tree fruits, in the Willamette Valley than in the Hood River Valley. Competition is greatest for the irrigated, river bottom, or valley floor soils. There is less competition for the heavier soils and foothill soils.

In Hood River, irrigation is necessary for high yields. In the Willamette Valley irrigation is preferred for new pear plantings, but lack of irrigation water is

not necessarily a deterrant to planting Bartlett pears. It is believed that unirrigated Bartlett pears can be a profitable crop on certain soils in the Willamette Valley provided they have proper depth, water holding capacity, and good drainage.

You have to be above average to make money in the Bartlett pear business. If you are average, you trade dollars most years. The Hood River study showed an average cost of \$70 per ton and an average price of \$73 per ton for the 13-year period 1947-59. The average yield for the cooperators in the study was 6.9 tons per acre.

Studies show that a yield one ton above average reduces costs about \$7 per ton; a yield two tons above average reduces costs \$10 per ton; and a yield three tons above average reduces costs about \$15 per ton. High yields per acre resulted in low average costs per ton and extremely low yields resulted in extremely high costs. In addition to high yields, however, successful orchard operation requires good management to get efficient use of labor, machinery, fertilizer, capital, land and other fixed or variable costs.

A Bartlett pear orchard requires some work every month of the year, averaging 189 man hours per acre. Peak months are June (thinning) and August and September (picking). In the Hood River study, the operator's labor averaged 70 hours per acre per year. Peak months for the operator are June, 11 hours per acre; and August, 12 hours per acre.

Hood River growers in the cost study have reduced their man labor requirements during the past 10 years. Total requirements dropped from 220 to 189 hours; preharvest labor from 165 to 132; and spray labor (thanks to greatly improved equipment) from 16 to 5 hours per acre.

Production costs will continue to drop as yields increase and man labor requirements decrease. Rising wage rates may partially offset these savings. Efficiencies from bulk handling, more compact trees, and other cost-reducing items are already being noted in some orchards. Others will follow, for orcharding--like other segments of agriculture--is not static. Change is ever present.

Hood River Bartlett pear orchards were valued at \$1,228 per acre. A 10-year average of 22 orchards showed land and trees worth \$655; buildings, \$161; equipment, \$212; and operating cash \$200 per acre. The orchards studied, however, averaged only 6.2 bearing acres.

Capital investment will not be the same in the Willamette Valley, but will be high enough to keep many farmers from talking about planting "50 acres of Bartlett's next year."

Before deciding whether to plant pears, a farmer must ask himself, "Is this the best use for my land? Will pears complement or conflict with my existing farm program? Am I capitalized for pear production? Can I manage an orchard?"

If you can combine land, labor, capital, and management into an efficient operation, you can produce Bartlett pears in the Willamette Valley competitively with other districts. If not, don't plant pears.