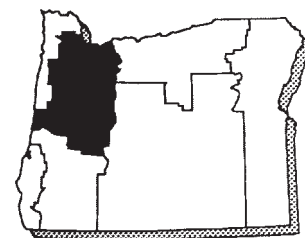


Enterprise Budget

Wine Grapes, Willamette Valley Region



Brenda Turner, student research assistant,
Tim Cross, Extension economist, and
Bernadine Strik, Extension horticulture specialist,
Oregon State University

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This enterprise budget estimates the typical costs and returns associated with wine grape production in the Willamette Valley region. It should be used as a guide to estimating actual costs and is not a representative of any particular vineyard. The major assumptions used in constructing this budget are discussed below. Assistance provided by area producers is greatly appreciated.

Land

This budget is based on a 20-acre established vineyard, with an additional 5 acres of land devoted to roads, buildings, and access areas. The land was purchased undeveloped for \$3,500 per acre. Interest on the land investment is estimated using a real interest rate of 9 percent. Annual land interest charge is calculated as 9 percent of \$87,500 (25 acres @ \$3,500) divided by 20 acres.

Improvements to the site include a gravel road, deer fence, well, and power line. A machine shed is used to store machinery and equipment. Other improvements include net for bird control and the trellis and catch wires.

Labor

All labor is hired at a rate of \$7.75 per hour, which includes worker's compensation, unemployment insurance, and other labor overhead costs. Labor hours for machinery operation are calculated by multiplying 1.1 times machine hours to allow for machinery setup, movement, and adjustment. All repairs are estimated separately from labor hours.

Capital

Opportunity costs of capital are charged at a rate of 9 percent for intermediate and long-term capital provided by the owner. Operating capital interest is treated as a cash expense and is charged at a rate of 9 percent; intermediate and long-term capital interest is treated as a non-cash expense.

Machinery and Equipment

The machinery and equipment used in the budget reflects the minimum machinery complement of a 20-acre vineyard. Since this is a grape production and not a wine production budget, no winery equipment is included. A detailed breakdown of machinery values is shown in table 1. April 1992 replacement costs are used, assuming the machinery is half depreciated. Estimated machinery costs are shown in table 2. Costs per acre are calculated by multiplying costs per hour times the annual hours of use shown in table 1. The pickup is assumed to be used 5,000 miles per year and all miles driven are related to grape production.

Establishment Costs

The vines are planted at 8-foot row spacing and trained to a standard Guyot upright trellis. Total trellis cost is \$38,000 for the vineyard. Permanent grass cover is planted between the rows. Netting was used for bird control in this budget; other less expensive (and less effective) control methods are available.

The wine grape production budget includes an amortized establishment cost of \$1,099.69 per acre. This is based on a total establishment cost of \$11,298 per acre amortized at 9 percent over a 30-year life. This charge represents the annual payment required to repay a loan taken out to establish an acre of grapes. If the establishment costs are paid using an owner's capital, the charge represents the interest from foregone alternative investments the owner could have made instead of establishing grapes.

For More Information

Detailed establishment cost information is in *Vineyard Economics: The Costs of Establishing and Producing Wine Grapes in the Willamette Valley, 1993*. Oregon State University Extension Service publication EM 8533 (Corvallis, 1993). Single copy charge is \$3.00; order from Publication Orders, Agricultural Communications, OSU, Administrative Services Bldg. 422, Corvallis, OR 97331-2119.



OREGON STATE UNIVERSITY EXTENSION SERVICE

EM 8537 Enterprise Budget

ECONOMIC COSTS AND RETURNS WILLAMETTE VALLEY REGION WINE GRAPES (\$/acre) 20 acres

<u>GROSS INCOME Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>	<u>Your Income</u>
Grapes	3.5	ton	1000.00	3500.00	_____
Total GROSS Income				3500.00	_____
<u>VARIABLE COST Description</u>	<u>Labor</u>	<u>Machinery</u>	<u>Materials</u>	<u>Total</u>	<u>Your Cost</u>
Machine Shed	2.58	0.00	12.50	15.08	_____
Pickup	9.66	11.47	0.00	21.13	_____
Prune	186.00	0.00	0.00	186.00	_____
Pull Brush	124.00	0.00	0.00	124.00	_____
Tie Canes	93.00	0.00	6.00	99.00	_____
Training Ties 1 acre x 6.00 = 6.00					_____
Flail Canes	12.50	8.29	0.00	20.79	_____
Flail Mow (3 times)	37.51	24.86	0.00	62.37	_____
Rodent Control	7.75	0.00	0.00	7.75	_____
Strip Spray	3.75	2.12	20.60	26.47	_____
Herbicide 1 acre x 20.6 = 20.6					_____
Spot Spray	13.50	1.06	5.00	19.56	_____
Herbicide .5 acre x 10.00 = 5.00					_____
Sulphur Spray	11.25	6.37	9.00	26.62	_____
Sulphur Spray 3 lbs. x 3.00 = 9.00					_____
Fungicide	6.25	4.28	30.00	40.53	_____
Fungicide 2 appl x 15.00 = 30.00					_____
Fungicide Rot	7.50	4.25	74.00	85.75	_____
Fungicide rot 2 appl x 37.00 = 74.00					_____
Training	232.50	0.00	0.00	232.50	_____
Cluster Thinning	116.25	0.00	0.00	116.25	_____
Leaf Pull on One Side	62.00	0.00	0.00	62.00	_____
Hedging	28.13	20.99	0.00	49.12	_____
Bird Control	0.00	0.00	150.00	150.00	_____
HARVEST					_____
Picking, Custom	0.00	0.00	384.99	384.99	_____
Tractor & Loader	18.76	9.46	0.00	28.22	_____
Load & Haul, Custom	0.00	0.00	105.00	105.00	_____
Grape Tax	0.00	0.00	43.75	43.75	_____
Total HARVEST				561.97	_____
Drop Wires	11.63	0.00	0.00	11.63	_____
General Labor	54.25	0.00	0.00	54.25	_____
Miscellaneous	0.00	0.00	25.00	25.00	_____
Operating Capital Interest	0.00	0.00	44.42	44.42	_____
Total VARIABLE COST				2042.22	_____
GROSS INCOME minus VARIABLE COST				1457.78	_____

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ECONOMIC COSTS AND RETURNS
WILLAMETTE VALLEY REGION
WINE GRAPES (\$/acre) 20 acres

<u>FIXED COST Description</u>	<u>Unit</u>	<u>Total</u>	<u>Your Cost</u>
CASH Cost			
Machinery and Equipment Insurance	acre	20.91	_____
Property Taxes & License	acre	16.80	_____
Site Improvement insurance	acre	18.48	_____
Total CASH Cost		56.19	_____
NONCASH Cost			
Amortized Establishment Cost	acre	1099.69	_____
Land Interest Charge	acre	393.75	_____
Machinery & Equipment-Depreciation & Interest	acre	148.71	_____
Site Improvement-Depreciation & Interest	acre	296.18	_____
Total NONCASH Cost		1938.33	_____
Total FIXED Cost		1994.45	_____
Total of ALL Cost		4036.67	_____
NET PROJECTED RETURNS		-536.67	_____
Break-Even Price, Total Variable Cost		\$ 583.00 per ton	_____
Break-Even Price, Total Cost		\$ 1153.00 per ton	_____

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ECONOMIC COSTS AND RETURNS WILLAMETTE VALLEY REGION WINE GRAPES (\$/acre) 20 acres

Table 1. Machinery Cost Assumptions

Machine	Size	List Price	Current Market Value	Salvage Value	Useful Life	Remaining Life	Annual Use
Tractor	35 hp	\$15,000	\$9,750	\$4,500	6,000 hr	3,000 hr	300 hr
Flail Mower	12 ft	3,500	2,100	700	2,400 hr	1,200 hr	150 hr
Fork Attachment		135	81	27	1,000 hr	500 hr	40 hr
Hedger	4 ft	4,800	2,880	960	2,000 hr	1,000 hr	60 hr
Airblast Sprayer		4,000	2,400	800	2,000 hr	1,000 hr	50 hr
Backpack Sprayer		1,400	840	280	2,000 hr	1,000 hr	50 hr
Pickup		7,000	3,850	700	100,000 mi	50,000 mi	5,000 mi

Table 2. Machinery Cost Calculations

Machine	Size	Costs per Hour					Hours or Miles per acre	Costs per Acre		
		Variable	Repair & Maint.	Fixed	Depr. & Interest	Total Cost		Variable	Fixed	Total
Tractor	35 hp	\$3.00	\$1.16	\$4.49	\$0.32	\$8.97	1.50 hr	\$6.24	\$7.22	\$13.46
Flail Mower	12 ft	0.00	1.78	1.80	0.14	3.72	7.50 hr	13.35	14.55	27.90
Fork Attachment		0.00	0.02	0.24	0.02	0.28	2.00 hr	0.04	0.52	0.56
Hedger	4 ft	0.00	2.29	8.57	0.48	11.34	3.00 hr	6.87	27.15	34.02
Airblast Sprayer		0.00	1.72	7.54	0.48	9.74	2.50 hr	4.30	20.05	24.35
Backpack Sprayer		0.00	0.60	2.64	0.17	3.41	2.50 hr	1.50	7.03	8.53
Pickup		0.05	0.03	0.14	0.05	0.27	250.00 mi	20.00	47.50	67.50
TOTAL								\$52.30	\$124.02	\$176.32



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