

Winegrape costs and returns

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Some background slide for
Wine management, markets and economics

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California winegrape costs and returns

- These data are produced by the Karen Klonsky and her team at UC Davis and collaborators around the state...county extension experts and growers
- They produce dozens of cost studies each year across the spectrum of major California crops and regions
- Each study focuses on a “representative” hypothetical farm of specific characteristics with typical practices and costs

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION



**2008 SAMPLE COSTS TO
ESTABLISH A VINEYARD AND PRODUCE
WINE GRAPES
RED VARIETIES - CABERNET SAUVIGNON
NORTH COAST – Lake County**

Specific parameters underlying costs

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Specific parameters underlying costs

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Land and vine assumptions

Land. The vineyard is located on fairly level land less than 10% slope in the upland area of Lake County. The hypothetical farm is comprised of 30 contiguous acres, 25 of which are planted with red wine grapes. The other five acres are occupied by roads, irrigation systems, and farmstead. Land is valued at \$20,000 per acre. This study assumes the land was purchased for planting a vineyard. The vineyard is owned and operated by the grower.

Vines. Dormant bench grafted Cabernet Sauvignon vines are planted in the spring (April) on 6 foot x 8 foot spacing with 908 vines per acre. Vines will be trained during the first and second years and are expected to begin yielding harvestable fruit in three years. They are expected to be productive for an additional 22 years.

Cultural practices

Pruning/Suckering/Canopy Management (CM). The vines are hand pruned in late February/early March.

Irrigation. Water is pumped to the vineyard after running through a filtration station into the drip lines in the vine rows.

Fertilization. Nitrogen (N) at 100 pounds per season is applied through the drip irrigation in equal amounts ...

Pest Management. The pesticides and rates in this cost study are listed in *UC Integrated Pest Management Guidelines, Grapes*.

Harvest. The vines are mechanically harvested by a custom operator which includes a machine operator and guide on the ground. Custom harvest charges vary depending upon row width and for this study, the cost is assumed to be \$300 per acre. It is assumed that the grower is hauling to a winery outside of the county and the cost is approximately \$20 per ton.

Labor and interest

Labor. Hourly wages for workers are \$10.00 for machine operators and \$8.00 per hour non-machine labor. Adding 33% for the employer's share of federal and state payroll taxes, workers compensation insurance for vine crops (0040) and other possible benefits gives the labor rates shown of \$13.30 and \$10.64 per hour for machine labor and non-machine labor, respectively.

Interest on Operating Capital. Interest on operating capital is based on cash operating costs and is calculated monthly until harvest at a nominal rate of 8.75% per year. A nominal interest rate is the typical market cost of borrowed funds. The rate will vary depending upon various factors, but the rate in this study is considered a typical lending rate by a farm lending agency as of January 2008.

Yields and Returns

Yields. Yield maturity is reached in the sixth year. An assumed yield of 5.75 tons per acre based on grower consensus is used to calculate returns. The annual yields are measured in tons as shown in Table B.

Returns. Return prices per ton for wine grapes are determined by variety and percent sugar. Average returns based on the California Department of Agriculture (CDFA) Crush Report for Lake County from 2001 to 2006 for Cabernet Sauvignon ranges from \$1,508 to \$1,803. An average of \$1,650 based on the above report is used for calculating net returns to growers at different yields and price.

**Table 2. COSTS PER ACRE TO PRODUCE WINE
GRAPES (Cabernet Sauvignon)
NORTH COAST - Lake County 2008**

| | |
|-----------------------|--|
| Cultural costs | \$2,066 |
| Harvest costs | \$609 |
| Total operating costs | \$2,691 (inc. other costs) |
| Cash overhead | \$1,062 |
| Non-cash overhead | \$3,974 |
| Total costs per acre | \$7,728 |
| Returns per acre | \$9,488 (5.75 x \$1,650) |
| Net returns per acre | \$1,760 (returns to operator labor and management) |

NET RETURNS PER ACRE ABOVE TOTAL COSTS PRICE

| <u>\$/ton</u> | (Yield) | | | | | |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | <u>2.75</u> | <u>3.75</u> | <u>4.75</u> | <u>5.75</u> | <u>6.75</u> | <u>7.75</u> |
| 1,350 | -3,892 | -2,583 | -1,274 | 36 | 1,343 | 2,653 |
| 1,450 | -3,617 | -2,208 | -799 | 611 | 2,018 | 3,428 |
| 1,650 | -3,067 | -1,458 | 151 | 1,761 | 3,368 | 4,978 |
| 1,850 | -2,517 | -708 | 1,101 | 2,911 | 4,718 | 6,528 |