

Virginia's Farm Wineries

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Ed. note: This *Horizons* article summarizes *The Impact of Farm Wineries on Virginia's Economy*, a study completed in December 1993. The research was funded by the Virginia Department of Agriculture and Consumer Services, and managed by the Virginia Winegrowers Advisory Board. Copies of the report may be requested from REAP at the address or phone number listed on the back of this newsletter.

Introduction

Virginia has a wine heritage going back to the first Jamestown settlement. In 1619, the first Virginia House of Burgesses required all settlers to plant a vineyard. Thomas Jefferson experimented with French Varietal wines at Monticello, and Virginia wines received a gold medal at the Paris exhibition of 1896. The first modern Virginia winery was established in 1972. By 1992, Virginia's wineries were producing 326,000 gallons of wine, valued at \$11.7 million.

The Virginia Farm Wineries Act defines a *Virginia farm winery* as one where at least 75 percent of the grapes processed are grown on Virginia vineyards and 50 percent of the grapes are grown on vineyards owned or leased by the winery. There are now 42 Virginia farm wineries, in 21 counties (Figure 1). Grape acreage has increased from 1,273 acres in 1988 to over 1,340 acres in 1992 (Table 1), with 3,078 tons of grapes harvested in 1992. Virtually all Virginia-grown grapes are used by Virginia's farm wineries.

Virginia's farm wine sector is a classic example of *value-added development*. Farm wineries take a raw product indigenous to an area and add value to it in

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Figure 1. Location of Virginia farm wineries, 1992.

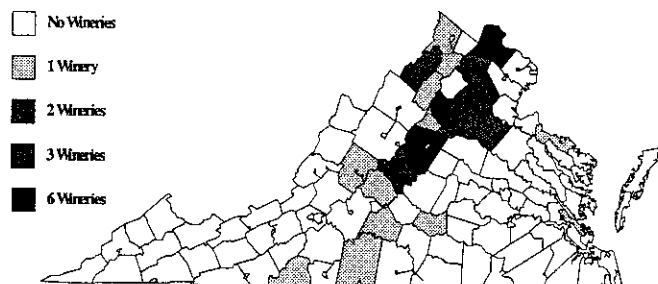


Table 1. Virginia grape acreage in 1992.*

<u>County</u>	<u>Acres</u>	<u>County</u>	<u>Acres</u>
Orange	200	Rappahannock	44
Fauquier	171	Augusta	35
Albemarle	169	Nelson	35
Loudoun	128	Frederick	31
Madison	119	King George	30
Westmoreland	55	Floyd	28
James City	49	Greene	20
Shenandoah	48	Other	179
Virginia Total			1,341

*There are also approximately 200 additional acres of vineyards in development stages.

several ways: by changing its form to a more-valued product, by making it more storable, and by making it transportable. But the most important way that the sector adds value is through its linkages to Virginia's tourism industry. The wine sector does this directly, by creating recreational opportunities for residents and non-residents of the state, and indirectly, by associating a high-quality, rural-oriented product with Virginia.

Farm wineries are also a classic example of *diversification*, both of agriculture and of Virginia's economy. Farm wines can be very different from one another, so they are identifiable with their producers and can evoke significant consumer loyalty. As a result, the sector depends less on overall wine consumption than on promotional efforts, local economic conditions, tourism, and other related conditions.

Our study of the Virginia wine industry had two goals. The first was to measure the contribution to the Virginia economy of the Virginia farm wine sector. The sector includes vineyards, wineries, and ancillary activities (wine related sales and festivals); the distribution channel (wholesale, retail, and transportation); and the input industries (those industries that provide supplies for production, distribution, and marketing activities). The second goal was to estimate the sector's potential for increased contributions in the future. Our evaluation of the present and potential economic importance of Virginia's farm wine sector begins with a look at the market conditions that Virginia's wine industry faces.

The Market for Virginia Wine

The National Market. The Virginia farm winery sector competes in the national spirits market and, to some extent, the larger national beverage market. Prices and availability of U.S. and foreign spirits, government regulations, tariffs and taxes, and consumer tastes all influence the demand for Virginia wines.

Table 2 shows the 12 states with the highest wine consumption in 1992. In 1992, the top six states listed represented more than 50 percent of U.S. wine consumption. The next six states listed, along with four other states not listed, represented another 25 percent of the total market. Virginia is one of 19 states in which adult per capita wine consumption increased during the 1980s (an 11.5-percent increase in Virginia). Per capita consumption is declining nationally, but total wine consumption is rising due to population growth.

Table 2. Top wine-consuming states, 1992.

1. California	7. Massachusetts
2. New York	8. Washington
3. Florida	9. Pennsylvania
4. Texas	10. Michigan
5. Illinois	11. Ohio
6. New Jersey	12. Virginia

Source: *The U.S. Wine Market, Impact Databank Review and Forecast*, 1992 ed., M. Shanken Communications.

In 1991, the two largest wine-producing states were California (90 percent) and New York (5 percent). Virginia was the 10th-largest wine-producing state, accounting for .12 percent of total output. California table wines accounted for six of the largest wine brands and 16 of the top 25.

Virginia wines are now recognized within the national market. Virginia wines are served at the White House, and a Virginia winery was invited to participate at the exclusive Wine Experience in New York, a gathering of 180 of the world's best producers from the best wine-growing regions.

The Regional Market. In 1991, the Southeastern Institute of Research, located in Richmond, conducted a regional market analysis for Virginia wines. The following are some of the most significant findings.

- Seventy-seven percent of consumers were aware that wine is an agricultural product of Virginia, and among wine buyers that awareness was 88 percent.
- Forty-four percent of Virginians consumed wine.
- Even though Virginia wines rate comparably to other wines in price and quality, 39 percent of Virginia wine buyers did not purchase Virginia wines.
- Wine consumption varied significantly across the state: Northern Virginia residents were most likely to purchase wine, followed by Richmond residents and then Tidewater residents. Residents of Southwest Virginia were least likely to purchase wine.
- Richmond wine buyers were more likely than Northern Virginia or Tidewater wine buyers to buy Virginia wines.
- Virginians over 55 years of age, and state residents of 20 years or longer, rated Virginia wines more highly than did other residents and were more likely to buy Virginia wines.
- Nearly two-thirds of all consumers were *not* aware of advertising for Virginia wines.
- Fourteen percent of Virginia consumers visit Virginia wineries. Visitation was more common among residents of Northern Virginia and Richmond, among those with higher education and income, among older consumers of wine, and among those who have lived in the state for at least 20 years.

These results are encouraging for Virginia wineries. Population changes occurring in Virginia (aging, urbanization, etc.) should increase the demand for Virginia wines. Annual total wine sales in Virginia are increasing, and wine consumption is increasing relative to consumption of other alcoholic beverages.

Economic Importance of the Farm Wine Industry

The direct monetary flows within the Virginia farm wine sector in 1991 are depicted in Figure 3 (bottom of page). In the figure, the arrows point *from* the purchaser *to* the seller, while the numbers beside the arrows are the amounts of money, in thousands of dollars, generated annually by these purchases. For example, consumers spent \$7,464,000 on wine purchased directly from wineries, while wineries made purchases worth \$3,385,000 from vineyards. Overall, the value of wine sales to the final consumer was \$16.5 million (the total of direct wine purchases from wineries, retail/wholesale sales, and restaurant sales); miscellaneous retail items sold equalled approximately \$1.9 million; and festival proceeds amounted to \$950,000, for a total of \$19.3 million in consumer expenditures (shown in the top box).

Table 3 (top of next column) summarizes the economic impact of the Virginia wine sector during 1991. The \$19.3 million in consumer expenditures on wine and related goods and services in 1991 (taken from Figure 3) generated directly and indirectly an increment of industrial output of \$65.4 million. Farm wineries generated a total income of \$31.2 million and 1,433 full-time equivalent jobs statewide. The wine industry's total contribution to gross state product (its value-added contribution) was \$36.4 million.

The most important linkage of the Virginia wine industry is with the state's multi-billion-dollar tourism industry. A study conducted by Virginia Department of Tourism in 1992 indicated that five percent of tourists visit Virginia wineries. Furthermore, winery visitors, on average, spend twice the amount that other tourists spend, stay longer in the state, and visit more attractions in Virginia.

Taxes imposed on the Virginia wine industry include a 4.5-percent sales tax, state excise tax of 20 percent of the price charged, and federal excise tax of \$.17 per gallon. Based on these rates and 1992 production levels, sales tax revenues generated directly by the wine industry in that year equalled \$3.1 million, excise tax revenues \$0.5 million, and federal revenues some \$57,000. State sales taxes generated in other sectors by the effects of wine sales amounted to

Table 3. Economic impact of Virginia wine consumption and related spending, 1991.

	Sales (mill.)	Income (mill.)	GSP ¹ (mill.)	Employment
Total Effects ²	\$65.4	\$31.2	\$36.3	1,433

¹GSP = gross state product.

²Sectors affected: agriculture, mining, construction, food manufacturing, nonfood manufacturing, transportation, utilities, wholesale trade, retail trade, financial services, business services, government, and other.

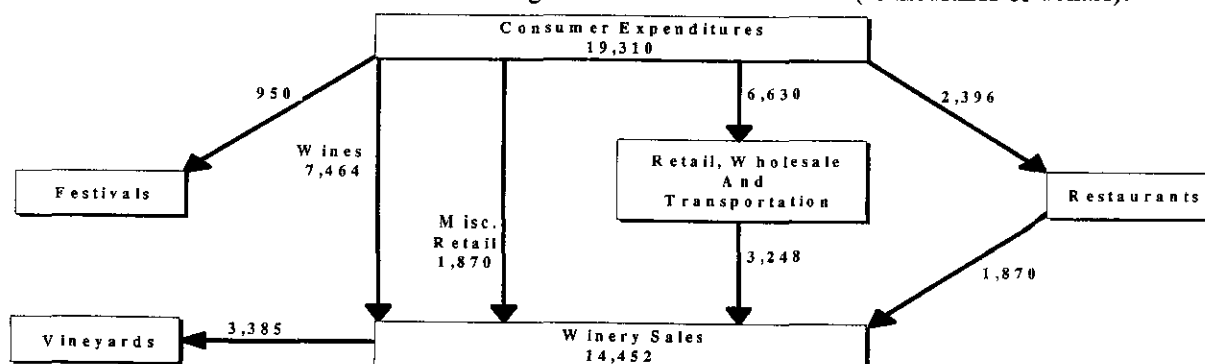
an estimated \$1.35 million. With total income resulting from the Virginia wine industry in the state at approximately \$31.2 million (see Table 3), income taxes were estimated to be \$1.25 million.

Our economic model indicated that wine sales by Virginia wineries are increasing at an average rate of 13.2 percent annually; wine sales by distributors are increasing 18 percent annually; and total Virginia wine sales are increasing 15.6 percent annually (all as of 1992). If the wine sector continues such growth for 10 years, it will contribute 1,800 jobs by the year 2002.

Virginia farm wines sales in 1992 represented 3 percent of the total wine market in Virginia and 7.5 percent of the premium wine market. Based on experiences in other states, Virginia wines could achieve a 20-percent share of the state's growing premium-wine segment, plus a share of the market in the East Coast states that make up Virginia's tourism base. In order to achieve this market share, the industry would need to produce enough wine to support annual sales of 500,000 to 600,000 cases—four times the current production levels (which could mean, as well, four times the economic impacts). To achieve such sales, the Virginia wine sector would need to invest in the development of 2500 acres, at \$12,000 per acre, plus agricultural and winemaking equipment and the increased wine inventories. Overall, this investment would be approximately \$100 million.

If the Virginia wine sector does grow to represent 20 percent of the state's premium-wine market, it would contribute sales of \$260 million, 5,732 jobs, and \$144 million of Gross State Product to the Virginia economy.

Figure 3. Monetary flows from the consumer to Virginia farm wineries for 1991 (in thousands of dollars).



Conclusions

Even though the Virginia wine industry accounts for a relatively small part of the state's employment and income base, it is still important to the state's economy. The farm wines sector is a vibrant, growing part of Virginia agriculture and commerce. Virginia's wines are of high quality and growing renown. At a time when policy makers are searching for ways to a diversify the economy, and for opportunities for value-added economic activities, Virginia's farm wine sector is an excellent example.

Wine production has a high value per acre. This high value can make wine production competitive with non-agricultural land uses, such as residential and commercial activity. Because of its high intensity, the wine sector is also an effective generator of employment and income in rural areas.

The wine industry can assume a larger role in rural economic development in Virginia. Expansion of the wine industry is a viable and sustainable economic development strategy for rural areas, because income and employment opportunities may be increased without damaging the rural character and environmental quality of a region. Finally, because of its strong linkages to tourism and services, the Virginia wine industry has potential for attracting and sustaining both agricultural and nonagricultural employment in rural areas.

NOTICES

*Several new REAP publications are available:

● *The Economic Impact of Agriculture in Virginia*, by Tom Johnson and Ernie Wade. This is the full report on the contribution of Virginia agriculture to the state's economy (a summary was included in the May/June 1994 issue of *Horizons*). Please request Publication 448-217/REAP R019 from Extension Distribution, 112 Landsdowne Street, Blacksburg, VA 24060; phone (703) 231-6192.

● "Major Issues in the 1995 Farm Bill." This is the transcript from REAP's September 1994 conference on the farm bill. To request a copy, please contact REAP.

● "The Virginia Tobacco Industry in a World of Change," by Wayne Purcell. To request a copy, please contact REAP.

● The latest issue of *The State of Rural Virginia*, entitled "Crime and Public Safety Spending in Virginia," was sent in January to most *Horizons* recipients. If you did not receive a copy, or would like additional copies, please contact REAP.

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