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## ABSTRACT

A study was conducted to determine whether wine experts, already trained in the traditional oenology method, would be interested in learning about wine through multimedia and distance learning. Data were gathered from 113 of the 502 members of the American Wine Society who attended a national conference in November 1995. About 58 percent were male and 43 percent female, 33 percent single and 67 percent married. The majority of those queried reportedly earn over \$101,000 per year. Many of those questioned were experts, although some were novices who were very interested in wine. The Pearson's r test with a correlation at less than .05 was used to assess the correlations between the degree of wine expertise and interest in learning oenology through multimedia and distance learning. The study found that those who had previously used multimedia and distance learning (50 percent of those who filled out the questionnaires) were more likely to favor learning oenology through these means. Experts in instructional technology agreed that multimedia and distance education could be used effectively in teaching oenology. (Appendixes include the survey, a sample of wine information available on the Internet, and survey results. Contains 38 references. (KC)

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# Oenology Through Multimedia and Distance Learning Education

Submitted by:  
**Deanna M. Gebhart**

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## INTRODUCTION

The study of oenology in the traditional method can be time consuming and expensive. I know, since I've been trained in that method. I also study technology. If you put the two study areas together, I guess you could say I'm a "techno-wineo." So, naturally I can see a correlation between oenology and learning about it through multimedia and distance learning. The educational significance of this theory is in the application of new uses for multimedia and distance learning technologies for adult education. Upon review of the literature, I was unable to find any literature that specifically addressed oenology through multimedia or distance learning.

My theory is not researchable through collecting data via previous research. I was able to find multimedia and distance learning research already completed on topics which closely relate to subgroups of oenology. There are many oenology products already on the market for multimedia and many on-line Internet services are available for distance learning. The next step was to survey members of a national wine organization to see if the members had any interest in learning about wine through multimedia and distance learning. Since I can conceive learning oenology through multimedia and distance learning I wanted to see to what degree oenologist trained in the traditional method would also be interested.

Through a questionnaire (Appendix A), I asked a group of potential wine experts if they had any interest in wine appreciation through multimedia and distance learning. This was done to determine if a correlation exist between the level of wine expertise and interest in multimedia and distance learning of those who fill-in the questionnaire. Clarifying information on previous multimedia and distance learning exposure, and how effective (scale 1 to 5) they felt specific aspects of multimedia and distance learning would be for wine appreciation. Demographic and socioeconomic data were also collected.

I will review literature on the traditional method of oenology; multimedia and distance learning technologies; oenology as it relates to similar subjects currently taught through multimedia or distance learning; and availability of multimedia and distance learning oenology material.

### **Statement of the Problem**

Will wine experts, already trained in the traditional oenology method, be interested in learning about wine through multimedia and distance learning?

### **Review of the Literature**

Oenology and formalized education about wine traditionally takes place outside a normal classroom setting and is customarily conducted at wine seminars for a food, wine or vineyard sponsored event (Shanken 1995, Todd 1995). Wine has always been a part of our lives and human history. Making wine is a miracle, at least to the wine makers (Howkins 1987). Over the centuries Europeans have always considered wine as a natural part of life (Howkins 1987, Schoonmaker 1988, Todd 1995, & Whitten 1995).

In America, we have not been brought up with wine as the traditional cultures of the Mediterranean basin. "These children grow up with a clear understanding that wine is part of the meal or part of religious or family celebrations--not an intoxicant" (Whitten 1995). When many Americans were buying their first bottles of wine in the 1950's, most of them didn't have a clue about what they were purchasing (Laube 1995). Without wine knowledge it is difficult and often expensive to find what you like. It's almost like marriage. You try out a few bottles until you find the one you like, then you stick with that brand. Some years are better than others (Adams 1986). According to the Larousse Encyclopedia of Wine, "The number of different wines has grown. The need for information--usable, well-organized, approachable information--is greater than ever" (Foulkes 1994).

America's wine education seems to have come on the heels of Leon Adams' best-selling wine primer *The Commonsense Book of Wine* first published in 1954. With Adams' commonsense and dry wit he brought down to earth the vintners grandeur about wine. Wine is not just another alcoholic beverage. It's more of an art, a food, and a health benefit (AMA 1995). "Wine as a business is of international importance, an affair of vast ramifications" (Schoonmaker 1988). In 1987-88, more than 25 million acres of the earth's surface was planted in vines (Shanken 1995); it's closer to 30 million acres today.

When we break down the many components of oenology we find that some of those components have already been taught via multimedia and distance learning. Let's begin with multimedia. "Multimedia is the combination of text, images, graphics, sound, animation and

motion video used as an enhanced user interface to a computer-based application” (Chacon 1992, Wood 1995). Multimedia learning systems are gaining widespread acceptance within the educational, training and retail communities (Wood 1995, Pentecost 1995).

“Such systems have been available for more than 10 years, with hundreds of off-the-shelf programs and custom applications produced to date” (Miller 1995). Multimedia includes almost anything that hooks up to computer CD-ROM and software programs, videodiscs, videotapes, kiosk interactive displays, etc., which are used for learning (Chacon 1992, IBM 1995). Multimedia would be a way an adult could privately learn oenology without the embarrassment of not knowing enough in a group situation (Miller 1995, Stanford 1992, Wood 1995). There are already non-traditional products on the market for oenology such as Multicom Publishing’s *Wines of the Word* (Software 1994) and hoards of information on the Internet (Appendix B).

Distance learning incorporates some of the features of multimedia, but is either broad or narrow casted by satellites, radio waves, fiber optics, etc. to the students, or the students login to or interactively participate with others from a remote site (Kapor 1993, Willis 1994). In the next generation of video programming, enhanced telecommunications and MPEG full-motion video technology, the computer on your desk becomes your gateway to see and hear the world (Editors 1992, Faier 1995, Kapor 1993, Willis 1994). The oenology information can be brought to your via a computer, modem and telephone line.

The traditional methods for learning about wine are: books and magazines; wine tasting events and seminars usually held at wineries, grand hotels, fancy restaurants, etc.; family information handed down through generations; college degree; working at a restaurant, vineyard/winery; wine organizations and clubs; owning a vineyard/winery; etc. (AWS, Howkins 1987, Schoonmaker 1988, Todd 1995, et.al). The study of wine involves so much more than just tasting the wine. It also involves growing the grapes (agriculture, climatology, viticulture), fermentation (science), knowing the various wine regions (art, cultural awareness, geography, history, travel), how many grapes yields how many bottles of wine (mathematics), selling grape, juice and wine (marketing), running the vineyard (accounting, business, management), cooking with wine and paring it with food (culinary arts); etc. (Schoonmaker 1988, Software 1994, Todd 1995).

Just as distance learning has proven to provide students with learning opportunities in K-12 math (Hancock 1994), K-12 science (Kay 1991, Lehman 1992), junior high social studies (Carpenter 1992), adult basic education (Henschke 1991), middle school language arts (VanGelder 1988), teacher training (Kendall 1992, McFarland 1995), and a plethora of other topics, technology continues to transform every aspect of our lives (Harden 1995, Turner 1991). People in remote areas would be connected not only to the oenology information, but to other oenologist as well (Carpenter 1992, Collis 1992, Kendall 1992, Rogers 1994, Turner 1991).

We also find, "The educational role of multimedia, ...has not been fully defined and many professional educators" are not ready to jump on the bandwagon (Peterson 1995). Although Lookatch questions the use of multimedia to supplant hands-on classroom science experiments as "not an experience," he does state, "Some instructional strategies are well suited for multimedia and other [on-line] technologies" (1995). Despite the problems with telecommunications-related educational activities most teachers are enthusiastic, but few actually make use or usage stops after the special project is over (Collis 1992). "...distance education... ..the process is an evolutionary one that proceeds as we try out theories from other disciplines and then either accept them as applicable or discard them as unusable in the context of distance education" (Dillon 1990).

Multimedia and distance learning as new educational technologies has drawbacks as well as good points (Collis 1992, Dillon 1990, Lookatch 1995, Peterson 1995). It is not the subject being taught, but in how the package/lesson is put together and utilized (Chacon 1992, Collis 1992). Oenology is a topic which I feel is adaptable to multimedia and distance learning. Until classes have been created and taught, we will never know for sure.

From the past to now, oenology has always been looked upon as an art as well as a science. The subtleties and nuances about wine are just as complex and compelling as the exact science used in its most wonderful creation. There is a large portion of oenology which can be learned through multimedia and distance education which related subject matter has already been taught in an educational setting. Also, many of the aspects of multimedia and distance learning of oenology already exist. The information needs to be gathered and then

presented in a structured fashion as brought to focus by Chacon's (1992) taxonomy of computer media in distance education.

Multimedia and distance learning are two new technologies to present oenology for those who are interested in learning more about wine, but who may feel intimidated by or can't afford to learn about wine in the traditional method. Oenology is either taught on a college level for viticulture students or in more private pricey affairs. Oenology through multimedia and distance learning would not only enhance and expand the education of those already involved, it could open the doors to the world of oenology to those who never knew it existed. Since the application of oenology to the technologies of multimedia and distance learning is new further research is needed in this area.

### **Hypothesis**

Wine experts, already trained in the traditional oenology method, will be interested in learning about wine through multimedia and distance learning education.

### **Definition of Key Terms**

OENOLOGY - the knowledge or study of wine

## THE METHOD

### The Subjects

One hundred thirteen (113) members of the five hundred two (502) members of the American Wine Society (AWS) who attended the AWS-sponsored national conference and extravaganza of wines that answered the questionnaire on Friday, November 10, 1995, at the 8:30 PM "Show Case of Wines" event. The annual conference brings professionals, serious amateurs and novices together to discover what is new in wine. The event has drawn wine-lovers, winemakers and gastronomes together every November for over 25 years.

The members of AWS are wine novices, experts, grape growers, amateur and professional winemakers, chefs, wine appreciators, wine educators, restaurateurs and anyone else who wants to learn more about the appreciation of wine and gastronomy. Of those who filled-in the questionnaire approximately 10% own their own wineries. Most were extremely knowledgeable oenologist, a few seemed to be wine novices, but all were interested in learning more about wine.

Table M.1 : Demographic Information

<i>Wed</i>	<i>Totals</i>	<i>21-30</i>	<i>31-40</i>	<i>41-50</i>	<i>51-60</i>	<i>61+</i>
Married	30	2	2	10	11	5
Single	18	1	6	9	2	
Married	46	2	4	9	16	15
Single	19	1	7	6	2	3
Totals	113	6	19	34	31	23
Females	48	3	8	19	13	5
Males	65	3	11	15	18	18
Single	37	2	13	15	4	3
Married	76	4	6	19	27	20

Table M.1 (above) from the population sampled 42.5% were female with 57.5% male; 32.7% are single and 67.3% are married. This seems to be consistent with the larger population of AWS members who attended the conference. From Table M.2 (next page),

most of the attendees were surveyed from New York, along with people from 14 other states and Canada.

Table M.2 : Home Location

Arkansas	2	Maryland	5	Rhode Island	1
Arizona	1	Michigan	6	South Carolina	4
California	3	New Jersey	3	Virginia	2
Canada	6	New York	26	Vermont	1
Connecticut	3	Ohio	12	Didn't Answer	22
Massachusetts	5	Pennsylvania	11	<b>Total Queried:</b>	<b>113</b>

Table M.3 : Socioeconomic Status

SES	Totals	<\$25K	\$26K-\$50K	\$51K-\$75K	\$76K-\$100K	\$101K+
3	1	1				
4	1			1		
5	5	4		1		
6	3	2			1	
7	5	2	2	1		
8	9	1	3	4		1
9	16		3	9	1	3
10	23	1	1	11	7	3
11	13			7	2	4
12	21			2	3	16
13	11			1		10
14	5					5
Totals	113	11	9	37	14	42

Table M.3 shows the socioeconomic makeup of the AWS members who filled-in the questionnaire. The majority of those queried reportedly earn over \$101,000.00 per annum. The SES total in the far left column represents the addition of reported answers for income, education and occupation. Each was given a rating 1 to 5, with 5 being the highest. No one reported themselves as all 5's (15). Oenologist tend to be from higher income brackets.

Table M.4 : Wine Expert Level

Expert	Totals	Novice	Fair	Good	Excellent	Expert
3	1			1		
4	1				1	
6	2		1		1	
7	3		2			1
8	5		2	2	1	
9	11		2	6	3	
10	21	3	1	6	6	5
11	20		3	8	7	2
12	12			5	5	2
13	16			2	7	7
14	12				5	7
15	7					7
21	1				1	
22	1				1	
Totals	113	3	11	30	38	31

Table M.4 (above) shows the expert level (level + bk/mag + taste) and how each rated their own knowledge.

**The Setting** *The Long Island Marriott Wind Watch, Hauppauge, New York*

At 8:15 PM, outside the main doors to the Marriott Grand Ballroom, I set up a table with a placard reading "Wine Appreciation Through Multimedia and Distance Learning Education." Armed with questionnaires, pens and backboards I waited for the people to arrive. While the crowd of wine lovers waited for the doors of the ballroom to open I asked people *by name* to fill-in the questionnaire. (All were wearing name tags.)

From 8:20 to 9:30 PM I asked any person with an AWS name tag to fill-in the questionnaire. It was all very exciting. For the first twenty minutes anywhere from 4 to 6 people were filling in the questionnaire. It dwindled to 2 to 3 people for the rest of the evening. The questionnaire took one to four minutes to complete.

### **The Design**

The design of this correlational research is to find out to what degree wine experts trained in the traditional method of learning about wine would be interested in learning about wine from multimedia and distance learning. Using wine expert level information will be correlated with who answered **Yes** or **No** to questions 10 and 11.

### **The Procedures**

The first thing was to choose my target audience and create the questionnaire. I tested the questionnaire on the general public. From that information I honed the questionnaire and had the target audience fill it in. The information was entered into Microsoft Access 2.0 database program and data were extracted. The following areas were assessed: demographic information, socioeconomic status, wine expert level, previous multimedia wine knowledge, previous distance learning wine knowledge, future interest in learning about wine through multimedia, and future interest in learning about wine through distance learning. The information was then correlated to see to what degree wine experts were interested in oenology through multimedia and distance learning.

### **The Record**

For the Survey Questions (Appendix A) of the questionnaire I found everyone drank wine and reported to have at least 1-2 glasses per week. Approximately 20 people asked me if I was asking *bottles* per week because they consumed more than 11 bottles per week. Most of the wine knowledge was attained through the four categories listed with a big surprise write-in vote for books. Most of my knowledge has come from the tasting, talking and fine dining of wine. Due to large number of people already rating books, I added that information to the effective factor of magazines, hence books/ magazines.

The total number of people who reported some of their wine knowledge is from distance learning (question 7), may have thought travel was distance learning. I would estimate that 8 to 10 "yes" answers could be "no's."

The use of question 8, was to designate between using on-line services at all, and then, to see if wine knowledge was searched for on-line. (Appendix C) More than half (27) of those who used an on-line service (50) used the Internet to look up wine information.

## THE RESULTS

The Pearson's  $r$  test and a correlation coefficient at the  $p > .05$  level were used to assess the correlation between the of wine expertise and interest in learning oenology through multimedia and distance learning. This statistical technique was utilized because it is the most appropriate measure of correlation between two sets of data. After conducting the Pearson's  $r$ , using expertise level and interest in multimedia (Table R.1) and distance learning (Table R.2), from the data gathered from the questionnaire, the results indicate that a correlation does not exist.

According to the values of correlation coefficient for different levels of significance (Gay 1992), the  $p > .05$  significant coefficient target number is 0.1946. Since the Pearson's  $r$  results were -0.01 and 0.09, there is no significant correlation:  $p < .05$ . Therefore, the original hypothesis that there would be a correlation is not supported.

Table R.1  
Pearson's Product Moment Correlation

Expert Level (X)	
Multimedia Interest (Y)	
Number of subjects (N)	113
Sum of X	1,277.00
Sum of Y	335.00
Sum of 'X' squared	15,259.00
Sum of 'Y' squared	1,675.00
Mean of 'X' scores	11.30
Mean of 'Y' scores	2.96
Sum XY	3,780.00
PEARSON'S $r$	-0.01
Degree's of freedom	111

Table R.2  
Pearson's Product Moment Correlation

Expert Level (X)	
Distance Learning Interest (Y)	
Number of subjects (N)	113
Sum of X	1,277.00
Sum of Y	295.00
Sum of 'X' squared	15,259.00
Sum of 'Y' squared	1,475.00
Mean of 'X' scores	11.30
Mean of 'Y' scores	2.61
Sum XY	3,400.00
PEARSON'S $r$	0.09
Degree's of freedom	111

### Attitudinal Survey

Although a correlation of wine experts and their interest in multimedia and distance learning did not exist, I did find a correlation between those who have already used multimedia and distance learning and would be interested in learning oenology through multimedia and distance learning respectively (Appendix C). Using the Pearson's  $r$  and the

correlation coefficient (target 0.1946) a correlation significantly exist for both multimedia (0.35) and distance learning (0.46). Note: the numbers do not correlate without the use of the correlation coefficient.

Table R.3

Pearson's Product Moment Correlation

**Previous Multimedia Use (X)****Multimedia Interest (Y)**

Number of subjects (N)	113
Sum of X	195.00
Sum of Y	330.00
Sum of 'X' squared	975.00
Sum of 'Y' squared	1,650.00
Mean of 'X' scores	1.73
Mean of 'Y' scores	2.92
Sum XY	800.00
PEARSON'S $r$	0.35
Degree's of freedom	111

Table R.4

Pearson's Product Moment Correlation

**Previous Distance Learning Use (X)****Distance Learning Interest (Y)**

Number of subjects (N)	113
Sum of X	295.00
Sum of Y	190.00
Sum of 'X' squared	1,475.00
Sum of 'Y' squared	950.00
Mean of 'X' scores	2.61
Mean of 'Y' scores	1.68
Sum XY	800.00
PEARSON'S $r$	0.46
Degree's of freedom	111

There is a significant correlation coefficient for both multimedia and distance learning previous use and interest in oenology through multimedia and distance learning respectively. Though, not the correlation I set out to discover, this significance is enough to warrant further research since those who have used the technologies in the past are interested in using them in the future.

## The Discussion

My target population were wine experts trained in the traditional method of oenology. One hundred and thirteen members of the American Wine Society who attended the AWS-sponsored annual November filled-in the questionnaire. The method of collecting the data was not done randomly. The people who filled-in the form were waiting to get into a wine tasting event. There was no control or randomization for those who filled-in the form. After analyzing the data, I would conjecture that this research is generalizable to similar wine organizations and oenologist, though not generalizable to the general public.

Fifty-six people had previous exposure to multimedia and/or distance learning in connection with oenology; that's one half of the population queried. Seventy-one people said they would be interested in multimedia and/or distance learning for oenology (Appendix C). The numbers show that there is no significant correlation between wine experts trained in the traditional method and their interest in multimedia or distance learning (The Results: Tables R.1 and R.2). But, I did find a significant correlation coefficient when I did a Pearson's  $r$  between whether they did or did not use multimedia or distance learning for oenology in the past and whether they would be interested I using multimedia (Table R.3) and distance learning (Table R.4) respectively.

Using all one hundred thirteen responses the correlation coefficient for multimedia interest is 0.35, and distance learning 0.46 (target 0.1946) which indicate that both are very significant. Although there is no significance in either correlation without using the coefficient, there was a large enough population surveyed which warrants the use of the correlation coefficient. This significance is large enough to consider further research in this direction.

Since there has been no research done in this area, within the review of the literature I relate the components of oenology to subjects which have already been taught via multimedia and distance learning education, i.e.: math, science, language arts, etc. (Lehman, et.al 1992; Stanford 1992; VanGelder, MacLean 1988) and various areas of

business (Wood 1995). The hoards of Internet information I found (Appendix B) is only a very small portion of the oenology information available on-line.

The questionnaire asked to rate (1 to 5) eight teaching modes for how effective they felt the areas would be for learning about wine (Appendix C). As expected, wine tasting classes (525) was rated the highest method for learning about wine with magazines (330) finishing second. Both of these are components of the traditional method for learning oenology. Video (283), and CD-ROM (253) were rated the highest, TV (237), and Computer Programs (228) made up the middle, with Radio (149) and Interactive Kiosk (140) as the least liked methods. I would conjecture that since an interactive Kiosk display encompasses videodiscs (much like CD-ROM), and computer programs displayed on a monitor (like t.v.) that the technology was not familiar to those queried.

The reason why "experts in oenology" may not be interested in multimedia and distance learning is to lack of knowledge about the technology. I also surveyed adults graduating with a Master's degree in instructional technology. I asked them to fill-in the questionnaire without informing them why. When they had finished, I gave a five minute talk about what I was doing.

Most had no interest what so ever in wine and no interest in learning about wine and answered that way. When I asked the instructional technology students if they thought oenology could be adapted to multimedia and distance learning they commented, "that had I known what you were looking for I would have answered differently." The instructional technologist knew that oenology could be effective through multimedia and distance learning, they just weren't interested in learning oenology.

The next step in this research would to convert some of the traditional oenology lessons into multimedia and distance learning applications, teach a few classes, and see the results. There is interest and use already. The information is readily available. All we need to do is gather it all together, learn from the mistakes of the past (don't make them), and apply the technology to those interested.

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# Appendix

# Wine: Multimedia and Distance Learning Survey

Research for Master's thesis

**DMG ENTERPRISES** \* 14 Hanrahan Avenue, Suite 1000 \* Farmingville, NY 11738-2406

## DEMOGRAPHIC INFORMATION

Circle or fill-in answer where appropriate

**Age:** 21-30 31-40 41-50 51-60 61+ **Sex:** M F **Marital Status:** Single Married

**Education:** HSD AAS Bachelor Master Master+ **Home** (city, state): \_\_\_\_\_

**Income:** <\$25K \$26K-\$50K \$51K-\$75K \$76K-\$100K \$101K+

**Occupation:** Executive Professional Manager Worker Houseperson

**Wine Preference:** Red White Blush Sparkling **Apprx. \$'s per Bottle Spent:** \$ \_\_\_\_\_

**Glycerin Level:** Very Sweet Sweet Semi-dry Dry Very Dry

**Wine Origin Drank Most:** Long Island California French Italian Other: \_\_\_\_\_

## SURVEY QUESTIONS

- Do you drink wine? YES NO USED TO
- Approximately how many glasses per week? 0 1-2 3-4 5-7 8-10 11+
- How would you rate your level of wine knowledge? Low 1 2 3 4 5 High
- How did you attain your wine knowledge? Friends Tasting Job related Wineries Other: \_\_\_\_\_
- How effective do you feel the following would be for learning about wine (rate 1 low to 5 high):  
 CD-ROM \_\_\_\_\_ computer programs \_\_\_\_\_ kiosk interactive display \_\_\_\_\_ magazines \_\_\_\_\_  
 radio \_\_\_\_\_ televised classes \_\_\_\_\_ video tape instruction \_\_\_\_\_ wine tasting classes \_\_\_\_\_
- Has any of your wine knowledge come from multimedia? YES NO
- Has any of your wine knowledge come from distance learning? YES NO
- Have you ever used a computer on-line internet service? YES NO
- Have you ever used a computer on-line internet service to find out about wine? YES NO
- Would learning about wine through multimedia interest you? YES NO
- Would learning about wine through distance learning interest you? YES NO

 Thank you for your time. 

[HTTP://AUGUSTUS.CSSCR.WASHINGTON.EDU/PERSONAL/BIGSTAR-MOSAIC/WINE.HTML](http://AUGUSTUS.CSSCR.WASHINGTON.EDU/PERSONAL/BIGSTAR-MOSAIC/WINE.HTML)

Our new URL is: [HTTP://WWW.SPEAKEASY.ORG/~WINEPAGE/WINE.HTML](http://WWW.SPEAKEASY.ORG/~WINEPAGE/WINE.HTML) TASTING ARCHIVE  
THE CELLAR (WINE FAQ, WGG & MORE)

THE WINE CELLAR MACVINE MAGAZINE

MACVINE MAGAZINE WASHINGTON WINE TOUR

WA WINE TOUR RATE ROBERT PARKER

RATE ROBERT PARKER VIRTUAL TASTING GROUP

VIRTUAL TASTING GROUP SEATTLE WINE WORLD

GUESS THE WINE! TOO MUCH OAK ? OAK POLEMIC GUESS THE WINE

[backwinepage@speakeasy.org](mailto:backwinepage@speakeasy.org)

\*

[HTTP://CYBERACTIVE-1.COM/HTML/WINE.HTML](http://CYBERACTIVE-1.COM/HTML/WINE.HTML) THE LONG ISLAND WEB

Producing some of the best wines in the country, Long Island wineries are a great place to visit and sample some of the fine wines they produce. Most wineries have tours and tastings available as well as sales. This site brings you all the information you want to know about Long Island. If you're traveling to New York, be sure to visit Long Island. And if you're visiting Long Island, make sure to visit The Long Island Web first!!!

**BANFI VINEYARDS**

111 Cedar Swamp Rd.  
Old Brookville, NY 11545  
Phone: 516-626-9200

**GRISTINA VINEYARDS**

Route 25, Main Rd.  
Cutchogue, NY 11935  
Phone: 516-734-7089

**PALMER WINERY**

Sound Ave.  
Aquebogue, NY 11931  
Phone: 516-722-9463

**BEDELL CELLARS**

Route 25, Main Rd.  
Cutchogue, NY 11935  
Phone: 516-734-7537

**HARGRAVE VINEYARD**

Route 48  
Cutchogue, NY 11935  
Phone: 516-734-5158

**PAUMANOK VINEYARDS**

Route 25, Main Rd.  
Aquebogue, NY 11931  
Phone: 516-722-8800

**BIDWELL VINEYARDS**

Route 48  
Cutchogue, NY 11935  
Phone: 516-734-5200

**JAMESPORT VINEYARDS**

Route 25, Main Rd.  
Jamesport, NY 11947  
Phone: 516-722-5256

**PINDAR VINEYARD**

Route 25, Main Rd.  
Peconic, NY 11958  
Phone: 516-734-6200

**BRIDGEHAMPTON WINERY**

Sag Harbor Tpk  
Bridgehampton, NY 11932  
Phone: 516-537-3155

**LENZ WINERY**

Route 25, Main Rd.  
Peconic, NY 11958  
Phone: 516-734-6010

**PUGLIESE VINEYARDS**

Route 25, Main Road  
Cutchogue, NY 11935  
Phone: 516-734-4057

**DUCK WALK VINEYARDS**

P.O. Box 962 Watermill  
Southampton, NY 11976  
Phone: 516-726-7555

**MATTITUCK HILLS WINERY**

Bergen & Sound Ave.  
Mattituck, NY 11952  
Phone: 516-9150

**SAGPOND VINEYARDS**

Sagg Road  
Sagaponack, NY 11762  
Phone: 516-537-5106

**VIRTUAL LIBRARY WINE INFORMATION BY GEOGRAPHICAL REGION**

Croatian Wines

Hungarian Wine regions

Long Island Wines

Napa Valley, California, USA

Wines of Northern Michigan, USA

New York State Wineries.

Liquor Control Board of Ontario (LCBO) Home Page Pilot

Oregon Wines

Piedmont Region, Italy

Santa Barbara County Vintner's Association

Wines of Slovenia

Sonoma County

South African Wines

Spanish Wines

Your Country Cellar featuring South African Wines

Washington State, USA

**EDUCATION AND RESEARCH**

UC Davis' Viticulture & Enology WWW Page

CSIRO Grapevine Server in Australia.

Wine Research and Extension at the Department of Food Science and Technology at Cornell University.

**ZINES AND NEWSLETTERS**

Wine Weekly - WWW Magazine

Grapevine

Wine Net News

**WINE SOCIETIES**

Society of Wine Educators

Slovenia

Sonoma County

South African Wines

Spanish Wines

Your Country Cellar featuring South African wines

Washington State Washington State

UC Davis' Viticulture & Enology WWW Page

Grapevine Server

Wine Research and Extension

\*

[HTTP://WWW.NYSAES.CORNELL.EDU/FST/MARKET/WINERES.HTML](http://www.nysaes.cornell.edu/fst/market/wineres.html)

**WINE RESEARCH AND EXTENSION**

- Dr Thomas Henick-Kling, Associate Professor, Wine Microbiology and Fermentation Technology, Cornell University, Department of Food Science and Technology, Geneva NY

- Dr Robert M. Pool, Professor, Vineyard Management, Cornell University, Horticultural Sciences, Geneva, NY

- Dr Terry Acree, Professor, Food Chemistry, Aroma of Foods, Cornell University, Department of Food Science and Technology, Geneva NY
- Dr Don Splittstoesser, Professor, Food Microbiology, juice and wine spoilage, Cornell University, Department of Food Science and Technology, Geneva NY
- Dr Mark McLellan, Associate Professor, Food Processing Technology, Cornell University, Department of Food Science and Technology, Geneva NY
- Dr Karl Siebert, Professor, Food Biochemistry, Cornell University, Department of Food Science and Technology, Geneva NY
- Dr Andy Rao, Professor, Food Process Engineering, Cornell University, Department of Food Science and Technology, Geneva NY

**Research:** Laboratory research concentrates on the physiology of lactic acid bacteria of wine, their metabolism of sugars and organic acids in wine, adaptation to growth at low pH, and the preparation of bacterial starter cultures for induction of malolactic fermentation in wine. Further studies are concerned with the fermentation activity of wine yeast and the effect of bacteria and yeast starter cultures on wine quality. Winemaking trials are carried out to study the effects of viticultural practices and variations of vinification techniques on wine quality. Also, new grape varieties and newly selected clones of established varieties are vinified to determine their winemaking potential for New York. The extension service provides technical information and assistance for quality assurance.

**Wine Analytical Laboratory and New York Wine Data Bank:** With support from the New York wine industry, the laboratory was started in February 1989. The laboratory provides analytical services and consultation to the wine industry and other fermentation industries. The laboratory is set up to carry out a wide range of standard analyses of juices and wines. The data base, which keeps record of all sample analyses carried out in the laboratory, for New York wineries and can provide some valuable data on juice and wine composition by variety, year, growing region and vineyard location.

**Annual New York Wine Industry Workshop:** The 3 day workshop provides updates on winemaking and viticulture techniques, laboratory techniques, regulatory issues, and marketing. Technical Seminars and Wine Tastings Special topic seminars for the and interested amateur winemakers.

\*

[HTTP://WWW.EE.PDX.EDU/~TMT/HTML/WINE.HTML](http://www.ee.pdx.edu/~timt/html/wine.html)

\*

[HTTP://WWW.OPAL.COM/GRAPEVINE](http://www.opal.com/grapevine)

HOME OF WINE INFORMATION & WINE NET NEWS E-Mail: [budstar@vino.com](mailto:budstar@vino.com)

[HTTP://WWW.VINO.COM/REVIEW.HTML](http://www.vino.com/review.html) Wines tasted very recently by Bud & Bill

1993 Peter Micheal Clos du Ciel Chardonnay **96pts**--this is the finest Chard I have had from CA in many years. buy it and don't look back...

1992 Cerretto Cabernet (Italy) la Bernardina **93pts**-- really spectacular stuff with lots of dark fruit yet presented in the understated manner of a great Bordeaux. One of the best Cabs from Italy other than Solia I have ever tasted.

1993 Ferrari Carano Chardonnay **87pts**--can't hold a candle to previous vintages. Hopefully just in a DUMB stage the wine just has very little of the structure that was indicative of it's predecessors

1993 Gundlach Bunschu Merlot(Sonoma) 89+--quite intense with tobacco overtones. This is another winner for GB, following their splendid 1992 this is a very credible effort. Given the lackluster array of other Merlots from CA in 1993 this wine is worthy of your attention.  
1993 Meerlust Merlot (S. Africa)--83pts--given the price(11.00) this wine is rather disapointing -- brownish and on the thin side it just doesn't have enough fruit. On the other hand it does have a Bordeaux style and is fully mature so it will go well with food.

\*

CANWINE (canwine-request@his.com) for Canadian wines

FOODWINE (listserv@cmuvm.csv.cmich.edu) for mainly food and some wine

OZWINE (maiser@koala.cs.cowan.edu.au) for Australian and New Zealand wines

\*

[HTTP://WWW.RAVENNA.COM/SAMS/](http://www.ravenna.com/sams/) Already catering to the worldwide market of wine connoisseurs, Sam's Wine Warehouse has extended their storefront to the WWW!

\*

[HTTP://WWW.WILDER.COM/WINERY.HTML](http://www.wilder.com/winery.html) E-Mail comments: winery@wilder.com

WELCOME TO APPELLATION SPRING WINERY AND THEIR T-SHIRTS:

Bonny Doon Vineyard	Dry Creek	Villa Mt. Eden
Cakebread Winery	Mirassou	Bonny Doon Vineyard
Carneros Creek	Robert Pecota	Back to Eureka! Web
Conn Creek	Schramsberg	Junction

\*

[HTTP://WWW.SOFCOM.COM.AU/NICKS/INDEX.HTML](http://www.sofcom.com.au/nicks/index.html) VINTAGE DIRECT - AUSTRALIA'S GREAT WINES AND GOURMET PRODUCTS AT DIRECT PRICES  
Vintage Direct is the mail order branch of the Melbourne based Nicks Wine Merchants group. We offer some of the world's best wines at direct prices together with a 100% money back guarantee - No ifs or buts. There's No Freebies, No Look Alikes and No Bull. Wines on the Internet (sm) is your cyberspace guide to wine and wineries. We are dedicated to extending the hospitality of wineries everywhere to all wine lovers on the web. You'll find great information here and outstanding wines from vintners around the globe. Meet the wineries and associations who are hosting this web site in Virtual Wine Country, visit the Virtual Tasting Room, shop for bargains in the Vintage Village, check the Cyber- Calendar of Wine Events and explore the WineWizard's Resourcery of wine information.

LINK TO VIRTUAL WINE COUNTRY VIRTUAL WINE COUNTRY - ALL WINERIES

LINK TO VIRTUAL WINE TASTING ROOM VIRTUAL WINE TASTING ROOM

Come in and "taste" your favorite wine. Try a Cabernet, Chardonnay, Merlot, Pinot Noir, or Zin. You'll find the winemaker's notes on each wine. Many are only produced in small quantities and can't be purchased elsewhere. It's a great place to find unique wines and exceptional values for your cellar, your friends or yourself!

LINK TO RESOURCERY WINEWIZARD'S RESOURCERY

Want to learn more about wine? Visit theResourcery(sm), where resources and Internet magic mingle. Read short articles on popular varietals. Try the Wine Quiz Question of the Week. The first and only place on the web where professional winemakers will respond to your questions about wine and winemaking. Get advice on the proper humidity for a wine cellar from Alderbrook's Winemaker, Bob Cabral.

MORE ABOUT WINES ON THE INTERNET

Wines CyberCalendar, send event information by e-mail to [events@wines.com](mailto:events@wines.com). We're continually exploring and creating new ways of using this medium to promote the enjoyment of good and great wine. Send comments and suggestions. E-mail: [comments@wines.com](mailto:comments@wines.com).

**Wine Producers:** Marquis Alfieri, Gary Farrell Wines, Brotherhood Winery , McGregor Vineyard & Winery, Cedar Mountain Winery, Thomas Coyne Winery, Thornton Winery, Alderbrook Vineyards & Winery, Château De Baun, Murphy-Goode Winery, Paradise Ridge Winery, Peju, Province, Mariani Winery & Saratoga Vineyards, Rutherford Hill Winery.

**Associations:** Livermore Valley Winegrowers Association , Monterey Wine Country Associates, Santa Cruz Mountains Winegrowers Association, Santa Barbara County Vintners' Association, Silverado Trail Wineries Association.

**WineWizard's Notes:** Alicante, Bouschet, Cabernet, Sauvignon, Merlot, Petite Sirah, Pinot Noir, Zinfandel, Chardonnay, Gewürztraminer, Riesling, Sauvignon Blanc (Fumé Blanc), Late Harvest and Dessert Wines, Champagne and Sparkling Wines.

\*

[HTTP://WWW.BRANCH.COM/ORFILA/ORFILA.HTML](http://www.branch.com/orfila/orfila.html) **ORFILA VINEYARDS GOURMET COOKING OILS** Orfila Vineyards, known for its award winning wines, is now offering a wonderful selection of great tasting and healthy gourmet cooking oils. Our wine maker, Leon Santoro has carefully selected our grapeseed oils and olive oil from the finest available. We are very happy and proud to offer you the opportunity to sample some of the world's healthiest and we think, best tasting cooking oils. Of course, we still produce a wide variety of fine wines. For information on our oils or award winning wines, call us at 800-868-9463.

\*

[HTTP://TOWN.HALL.ORG/FOOD/WINE/](http://town.hall.org/food/wine/) **INTERNET MINIBAR** [webmaster@town.hall.org](mailto:webmaster@town.hall.org)

\*

[HTTP://WWW.CLARK.NET/PUB/WINE/HOME.HTML](http://www.clark.net/pub/wine/home.html)

Welcome to The Internet Wine Rack, the on-line catalog for fine wine and liquors.

\*

[HTTP://WWW.SHOPPING2000.COM/SHOPPING2000/AMBROSIA/](http://www.shopping2000.com/shopping2000/ambrosia/) **SHOPPING2000(tm)**  
160 Madison Ave., NY 10016. Phone: 212-447-9494 E-mail: [cw@pipeline.com](mailto:cw@pipeline.com)

\*

[HTTP://WWW.COMMERCE.COM/CLOS/CLOS-TOP.HTML](http://www.commerce.com/clos/clos-top.html) **CLOS LA CHANCE WINES - CA**  
Phone: 1-800-ITS-WINE Fax: (408) 741-1198 E-mail: [WJMurphy@aol.com](mailto:WJMurphy@aol.com)

\*

[HTTP://WWW.WINENLIQUOR.COM/WINE/WINE.HTM](http://www.winenliquor.com/wine/wine.htm)

\*

[HTTP://WWW.MAGICWINDOWS.COM/~MWINFO](http://www.magicwindows.com/~mwinfo)

\*

[HTTP://WWW.WINE.COM/WINE/](http://www.wine.com/wine/)

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\*

[HTTP://WWW.VIRTUALVIN.COM/](http://www.virtualvin.com/)

Fuji Publishing Group: Wine Page Virtual Vineyards

ID	CD	Prog	Kiosk	Bk/Mag	Radio	TV	Video	Taste	MM	DL	OL	WOL	WMM	WDL
1	5	3	0	3	1	3	4	5	yes	no	yes	no	yes	no
2	2	2	2	3	2	3	3	4	yes	yes	no	no	yes	yes
3	5	3	1	2	0	4	4	5	no	no	no	no	yes	no
4	3	3	2	2	2	4	4	5	no	no	yes	no	yes	yes
5	4	1	2	5	1	3	4	5	yes	yes	yes	yes	yes	yes
6	3	3	3	4	3	3	4	5	yes	no	no	no	yes	yes
7	3	3	0	3	1	5	5	5	yes	yes	yes	yes	yes	yes
8	3	3	0	4	1	1	2	5	no	no	no	no	no	yes
9	1	2	1	5	3	2	3	5	yes	yes	yes	yes	no	no
10	3	3	3	4	2	4	3	5	no	yes	yes	yes	yes	yes
11	0	0	0	0	0	2	3	5	no	no	no	no	yes	yes
12	3	0	0	5	1	0	5	5	yes	yes	yes	yes	yes	yes
13	3	4	0	4	3	2	2	5	yes	no	no	no	no	no
14	0	0	0	0	0	4	4	5	yes	yes	yes	no	yes	yes
15	0	0	0	4	0	0	0	5	no	no	no	no	no	no
16	5	5	0	4	4	5	5	5	no	no	no	no	yes	yes
17	0	0	0	0	0	0	5	5	no	no	no	no	yes	yes
18	3	0	0	3	0	0	3	5	yes	no	yes	no	yes	yes
19	4	4	3	3	2	2	3	5	no	no	yes	no	yes	yes
20	0	0	0	4	0	0	0	5	no	no	no	no	no	no
21	5	4	4	3	3	4	5	5	no	yes	yes	yes	yes	yes
22	2	4	2	3	1	3	3	5	no	yes	yes	yes	yes	yes
23	1	1	1	3	1	2	2	5	no	no	no	no	no	no
24	0	1	0	0	2	4	3	5	yes	no	no	no	yes	yes
25	5	0	0	0	0	0	0	0	no	no	no	no	no	no
26	5	3	3	4	2	3	4	5	no	no	yes	no	yes	yes
27	5	5	3	4	2	3	2	3	no	yes	yes	yes	yes	yes
28	3	3	2	4	4	4	3	5	no	yes	yes	yes	yes	yes
29	1	1	1	1	1	1	1	5	no	no	no	no	no	no
30	1	1	1	1	1	1	3	5	no	no	yes	no	no	no
31	3	3	2	2	1	3	3	5	no	yes	yes	yes	yes	yes
32	4	4	3	2	3	3	3	5	no	no	yes	no	yes	no
33	4	4	3	1	0	3	4	5	yes	yes	no	no	yes	yes
34	0	0	0	0	0	0	0	5	no	yes	yes	yes	yes	yes
35	4	2	3	5	3	3	3	5	no	yes	yes	yes	yes	yes
36	1	1	1	1	1	1	1	5	no	no	no	no	yes	yes
37	1	1	1	3	3	3	3	5	no	no	yes	no	no	no
38	5	3	4	1	2	1	1	1	no	no	yes	no	yes	yes

BEST COPY AVAILABLE

ID	CD	Prog	Kiosk	Bk/Mag	Radio	TV	Video	Taste	MM	DL	OL	WOL	WMM	WDL
39	5	5	4	0	3	2	4	2	yes	yes	no	no	yes	no
40	4	2	3	2	1	3	3	4	no	no	no	no	no	no
41	1	1	1	3	1	2	3	4	no	no	no	no	no	no
42	2	2	2	2	2	4	4	4	no	no	yes	no	yes	no
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45	3	3	4	5	2	3	3	5	no	no	no	no	no	no
46	3	1	0	2	0	0	4	5	no	yes	yes	yes	yes	no
47	0	0	0	5	0	0	0	5	no	yes	yes	yes	no	no
48	0	0	0	0	0	0	5	5	no	no	no	no	yes	yes
49	5	5	3	4	2	4	5	5	yes	no	no	no	yes	yes
50	1	1	1	2	0	2	3	4	no	no	no	no	no	no
51	1	1	1	1	1	1	1	5	no	yes	no	no	yes	yes
52	5	5	0	5	5	0	0	5	yes	yes	yes	yes	yes	yes
53	1	1	1	12	2	1	2	5	no	no	yes	no	no	no
54	4	4	2	3	1	3	4	5	yes	yes	yes	yes	yes	yes
55	4	5	0	3	0	0	2	1	yes	no	no	no	yes	no
56	3	5	4	5	2	4	2	5	no	yes	yes	yes	yes	yes
57	1	1	1	13	1	2	2	5	no	no	no	no	no	no
58	0	0	0	4	0	0	0	5	no	no	no	no	no	no
59	0	0	0	0	0	0	0	0	no	no	no	no	no	no
60	0	0	0	4	0	0	0	4	no	yes	yes	yes	yes	yes
61	0	0	0	4	3	3	3	5	yes	no	no	no	yes	yes
62	2	3	0	3	1	2	3	4	yes	yes	yes	yes	yes	yes
63	5	5	3	4	4	5	4	5	yes	no	yes	no	yes	yes
64	3	3	4	3	2	2	2	5	no	no	yes	no	yes	no
65	5	5	2	3	2	3	4	5	no	yes	yes	yes	yes	yes
66	1	1	1	5	2	1	3	5	no	no	no	no	no	no
67	0	0	0	4	0	0	0	4	no	no	no	no	no	no
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69	0	0	0	2	0	0	0	5	yes	yes	no	no	yes	yes
70	0	3	0	3	0	3	3	4	no	no	yes	no	no	no
71	1	1	1	1	1	2	1	5	no	no	no	no	no	no
72	3	4	3	3	1	2	3	5	yes	no	no	no	no	no
73	3	3	1	3	1	3	3	4	yes	yes	yes	yes	yes	yes
74	2	2	1	3	1	3	2	3	no	yes	no	no	no	yes
75	0	0	0	4	0	0	0	5	no	no	no	no	no	no
76	4	4	4	4	5	5	3	5	yes	yes	yes	yes	yes	yes
77	3	3	3	2	2	3	3	5	no	no	no	no	no	no

Appendix C : The Records

ID	CD	Prog	Kiosk	Bk/Mag	Radio	TV	Video	Taste	MM	DL	OL	WOL	WMM	WDL
78	3	3	0	4	1	3	3	5	yes	yes	no	no	yes	yes
79	1	1	1	2	1	2	2	5	no	no	no	no	no	no
80	0	0	0	0	0	0	0	5	yes	no	no	no	no	no
81	4	4	0	4	0	4	4	4	yes	yes	yes	yes	yes	yes
82	0	3	1	3	4	4	3	5	yes	no	no	no	yes	yes
83	3	3	0	2	4	5	5	4	no	no	no	no	yes	yes
84	3	2	1	3	1	2	4	5	no	no	yes	no	yes	no
85	1	1	1	3	1	3	4	5	yes	no	no	no	yes	no
86	1	1	1	5	3	4	5	5	yes	no	no	no	yes	no
87	1	1	1	4	1	2	1	5	no	yes	no	no	no	no
88	5	4	1	2	1	3	5	5	no	no	yes	no	no	no
89	1	1	1	1	1	1	3	5	no	no	no	no	no	no
90	0	0	0	5	0	0	0	5	yes	no	yes	no	no	yes
91	0	0	0	0	0	0	0	5	no	no	yes	no	no	no
92	2	2	2	4	3	4	3	5	yes	yes	no	no	yes	yes
93	1	1	1	1	1	1	1	5	no	no	no	no	no	no
94	3	3	3	1	1	1	1	5	no	no	no	no	no	no
95	1	1	1	1	1	1	1	3	no	no	no	no	no	no
96	2	2	1	5	1	3	3	5	no	no	yes	no	no	no
97	3	2	4	2	1	4	3	5	no	no	yes	no	yes	yes
98	0	0	0	4	0	0	0	5	yes	no	no	no	no	no
99	3	3	2	1	1	2	2	5	no	no	yes	no	no	no
100	4	0	0	4	0	0	0	5	no	no	no	no	no	no
101	4	3	0	4	0	3	3	5	no	no	no	no	no	yes
102	0	4	0	0	0	0	4	5	yes	yes	no	no	yes	yes
103	3	3	2	3	1	2	2	5	yes	yes	yes	yes	yes	no
104	1	2	0	4	3	3	3	5	yes	no	no	no	no	no
105	3	3	2	3	2	2	2	4	yes	no	no	no	yes	yes
106	3	5	0	5	1	3	3	5	no	no	no	no	no	yes
107	3	2	3	4	1	1	1	5	no	yes	yes	yes	yes	yes
108	5	4	4	3	3	4	4	5	yes	yes	yes	yes	yes	yes
109	0	0	0	0	0	0	0	5	no	no	no	no	yes	yes
110	0	0	1	4	1	4	4	5	no	no	no	no	no	no
111	5	1	1	4	3	4	4	5	no	no	yes	no	yes	yes
112	3	3	3	3	1	4	5	5	no	no	no	no	yes	yes
113	5	0	0	0	0	0	0	5	yes	yes	yes	yes	yes	yes
Total	253	228	140	330	149	237	283	525						
								Yes =	39	38	50	27	66	59
								No =	74	75	63	86	47	54

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