**FINGER LAKES VINEYARD NOTES**

**NEWSLETTER NO. 10**

**NOVEMBER 1, 2004**

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**REVIEW OF THE 2004 GROWING SEASON**

Timothy E. Martinson  
Finger Lakes Grape Program

For some growers, the stage was set for the 2004 growing season on January 9 and 10. That’s when temperatures dropped to -50°F to -60°F, a week after temperatures had been in the 50s. The most severe winter injury seen in the Finger Lakes since the 1980 “Christmas Massacre” was the result.

This cold event apparently came from the Northeast (it was -36°F in the Adirondacks), and hit some of the most protected sites along Seneca and Cayuga lakes. Being close to the lake provided little help this time. The 5 to 10°F temperature gradient that normally protects lakeside vineyards did not appear on these two cold nights. More typically, arctic blasts come out of the northwest and pass over Lake Ontario (where they pick up heat) before they reach the Finger Lakes.

Geographically, the most severe injury was in the northern and eastern portions of the Finger Lakes. Most northerly Cayuga lake vineyards had moderate to severe injury, and damage on Seneca lake was severe on the North end down to Valois on the East side, lessening from Hector south. West side had more moderate injury, but with similar north-south trends. On Keuka lake, from mid-lake on south, injury to cold-sensitive varieties was less severe than in the north. Temperature data loggers South of Pultney registered -8°F, while -18°F was reported at the Penn Yan airport. Vineyards on West Canandaigua lake seemed to have had more moderate injury levels.

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**FOCUS ON THE FUTURE**

Timothy E. Martinson

As the 2004 growing season ends, growers are facing sharply reduced income and the need to renovate vineyards and replace vines. We estimate that the equivalent of 330 acres of V. vinifera will need replanting, plus a substantial acreage of hybrids, notably Dechaunac. More vineyards will need trunk replacement and perhaps another year of reduced production before returning to normal production. Meanwhile, sales at small and mid-sized wineries continue growing at 3-4% per year, much of the growth being in the hybrid/ vinifera range. Everyone wants Riesling. Where will the grapes come from to support this growth? On the native side, Ciffatar’s $143/ton price for ripe Concord may have a ripple effect for other major processors in 2005.

Looking forward, growers and winemakers are facing important decisions about the futures of their businesses, such as: Should I replant my Pinot Noir, Merlot, and Gewurztraminer, or switch to less cold-sensitive varieties? What bulk variety will replace my Dechaunac? Should I expand my hybrid acreage as a hedge against additional winter injury to my V. vinifera? What about my Catawba? Where will I get the money to finance this?

Disaster assistance will cover some of the losses (both for 2004 crop and re-planting through TAP program). Will these funds be used to re-establish what we had in the ground? My opinion is that this disaster (and the disaster assistance fund) represents a unique opportunity to upgrade your vineyards for the future. Doing so will require a lot of planning, communication, and rethinking among wineries and growers.

I hope to focus part of our winter convention on the topic of After the Freeze, what’s next? Let’s all use this winter to consider how we can get the right grapes in the ground, protect what we have against further injury, supply our tasting rooms and distributors with the right wines, and finance it all. Stay tuned.

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**HARVEST ISSUE**

**NEWSLETTER NO. 10**
2004 Growing Season
(Continued from page 1)

The shift in temperatures that preceded this injury was abrupt (Figure 9).

Figure 1. Daily high and low temperatures at Geneva. October 2003 to May 2004.

Late December average temperatures had been hovering around freezing, before suddenly shifting to the mid-40s and 50s. In Geneva, two nights were below -5°F, with two additional nights in late January and mid February below -6°F.

Cold weather wasn’t the only factor behind winter injury. Poor vine acclimation during the latter part of 2003 also contributed. The cool 2003 season, combined with a large crop, delayed harvest – and reduced accumulation of reserves in buds and roots. Late ripening reds (Merlot, and Cabernet franc, but especially Cabernet Sauvignon) showed these effects, as did those of the heavier (13-13 - 13 tons and "13" blank at harvest) Concord blocks.

Rainfall and degree-days. It's tempting to think of 2004 as a repeat of 2003. But there were several important differences in both frost accumulation (degree-days (DD) and rainfall patterns. The 2003 season got off to a slow start, with below average DD accumulations in May and June (Figure 2). As a result, bloom in 2003 was delayed by almost two weeks. This year, we had an extremely warm May (150 DD above average) and an average June.

Bloom was close to a week early as a result. July and August of this year were much cooler than in 2003 (August of 2003 was actually warmer than average), but September was warm enough to make up for the cool August.

Figure 2. Monthly abscisal in growing degree days from 30 year average at Geneva, NY.

Figure 3. Deviations in cumulative (weekly) growing degree days at Geneva in 2003 and 2004.

Figure 3 provides the best comparison of cumulative DD compared to an average year. In 2003, DD accumulations never caught up to the average (zero on the graph) following the cold May and June. In 2004, the 'surplus' in May turned into a 'deficit' in July and August, but the warm September put us back above average DD accumulations. In short, we had summer in September this year.

2004 FINGER LAKES GRAPE PROGRAM ADVISORY COMMITTEE MEMBERS

The Finger Lakes Grape Program Advisory Committee is a group of 13 grower and industry representatives that provides guidance and direction in planning meetings and activities of the program. Current members are:

Ontario County:
Rich Jerome, Naples
John Ingle, Bristol
Seneca County:
Cameron Hosmer, Clyde
Bill Dally, Clyde

Schuylerville County:
John Santoli, Hector
Phll Davis, Hector

Steuben County:
Jim Pizura, Pultney
Keith Eggers, Pultney

Yates County:
Jim Bedient, Genevaport
Thomy Humphreys, Dundee

Processor Reps:
Tim Moore, Covandaigua Wine Co.

Thank you to our members for their time and expertise.

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Rainfall. Monthly rainfall (Figure 4) was above average in all months except June. July rainfall was a whopping 3.5 inches above average (well above 2003). It rained almost every day, and the rainy weather continued through the first half of August, followed by the drying trend that continued through September. Note that August was rainier in 2003, while September was about average. Most of our September rainfall (Figure 5) came from two events: Hurricanes Francis (September 5) and Ivan (September 17) each dropped a couple of inches of rain on the Finger Lakes. Aside from these two events, September (and early October) provided warm weather with lots of sunshine to hasten ripening of grapes.

Consequences. Thanks to our warm May, vine development was either ahead or on track throughout the season, despite the cold, rainy summer weather. The abundant, constant rainfall did have several consequences, however:

- Nutrient deficiencies. Nitrogen levels were low, as rainfall washed N out of the soil and waterlogged soils impacted root function. Roots need oxygen to respire, and my guess is that at least in heavier soils the ability to take up N and other nutrients was reduced during much of July. At one site where we measured soil N, levels were about 1/4 of what we saw last year. Yellowing basal leaves, manganese and magnesium deficiency late in the year were very common.

- Late-season shoot growth. Abundant rainfall kept vines growing into late August, long after growth normally starts to slow. This is generally considered undesirable, because actively growing shoots compete with fruit for photosynthate, and late shoot growth can delay hardening off and reduce winter hardiness.

- Downy mildew. The past two seasons have been tremendous for DM in particular, with abundant rainfall and warm, humid nights. About the time everyone was ready to put their sprayers away, the two September hurricanes again led to explosive growth of this pathogen. The result is that many vineyards have lost 30-50% of their leaf area during the post-vinification fruit ripening period.

- Fruit breakdown. Our two September rainstorms, Ivan in particular, disproportionately affected thin-skinned varieties and those that were nearing harvest in mid-September. Red hybrids and pinot noir, in particular, had increased berry cracking and more botrytis as the result of the heavy Sept 17th rains. Other varieties fared better.

Winter injury. I've written detailed information about winter injury in the July and August Vineyard Notes. Briefly, as we go through harvest, growers are facing both short term (2004) and long term crop losses (wine replacement). One third to 1/2 of V. vinifera acreage will have less than 1/2 "normal" yield. We estimate that about 300 acres (26%) of vines will need to be replanted. Hybrids had significantly less yield loss due to bud injury, and vine death in a few varieties (notably Dechaunac) approached levels seen with vinifera. Native-farmed boaters, but some varieties (Niagara) had significant trunk injury and mid-season vine collapse. Growers of all varieties will need to carefully evaluate the need for trunk replacement.

Data we collected this summer demonstrated the importance of hilling and controlled vines. Figure 6 shows the range of wine mortality in hilled vs. non-hilled vineyards. Those that were hilled up had wine death ranging from 0 to 10%, while unfilled vineyards had a range of 10 to 90% wine mortality. Hilling up prevented a one-year crop loss (dead top but suckers for renewal) from turning into a five-year (replant) crop loss. This underscores the importance of hilling up, even in the most protected Finger Lakes sites.

Smaller and fewer clusters. Another consequence of both winter injury and heavy 2003 crops was that yields were significantly less fruitful. Much of the crop in varieties with significant bud injury probably came from secondary and tertiary buds. As a result there were significantly fewer clusters per shoot (e.g., 0.6 in Chardonnay vs 1.5 in previous years) and fewer berries per cluster. Riesling and Cabernet Franc clusters we measured had 1/2 to 1/3 fewer berries per cluster than in 2003. Concord, even with modest bud injury, also had fewer berries per cluster. Normally, Concord clusters average 35 berries (balance-pruned), but this year there were closer to 22-25 berries per cluster. Even increased berry weight (thanks to Hurricane Ivan) was not enough to make up for the lower berry number and reduced clusters per vine.

(Continued on page 14)
MARKETING

2004 GRAPE PRICE SUMMARY
Timothy E. Martinson

2004 Staked Grape Prices were up in all categories. Prices reported by processors increased by 2% for natives, 4% to 10% for red and white hybrids, and 4% to 8% for V. vinifera varieties. The table is compiled from price lists submitted to the NV Department of Agriculture by area processors, and are subject to voluntary rates. Individual prices were published in the September issues of Vineyard Notes.

Natives. Prices averaged $10 per ton higher than in 2003. California prices declined, reflecting the cancellation of several thousand tons by California, in contrast with California, the second largest consumer of Natives. In all, about 200,000 tons were purchased from California, with new crop prices ranging from $100 per ton to $200 per ton. The highest prices were reported for Concord, which averaged $250 per ton. The second largest processor is Lake Erie, which purchased about 25,000 tons of native grapes.

Hybrids. Overall prices for red hybrids increased by $20 per ton. Marechal Foch, Black Star and Rangiron both experienced price increases, with gains of 10, 10 and 15%, respectively. White hybrids averaged $550 per ton higher in 2004, with most posting double-digit percentage gains. Average prices from California were substantially higher.

V. vinifera. Prices were up by $900 per ton on average, but major varieties (Cabernet Franc, Merlot) were up by $100. One variety reported a $900 per ton price for Merlot. "White vinifera prices averaged $100 per ton lower, but the increase in prices reflected low supply for many varieties, including some white and red hybrids, along with very limited amounts of V. vinifera grapes."

To properly interpret these numbers, it is important to remember that the figures shown are not adjusted by tonnage purchased. They do not reflect the average prices received by grape growers in the Finger Lakes. The prices shown for the variety are the average for the variety, so the number of wineries supplying grapes is asked upon, and how many wineries are buying from the variety.

We thank the following processors and winemakers for providing copies of their price lists for this report:

Anthony Road Winery
Atwater Estate Winery
Burt's Ice Wine
Canaan Valley Bondard Winery
Carriage House Companies, Inc.
Cliffstar Corporation
Dr. Konstantin Frank Vinifera Wine Cellars
Faul Spring Winemakers Shop
Fox Run Vineyards
Fuller's Winery
Glentora Wine Cellars
Hazeltine-1852 Vineyard
Heron's Hill Winery
King Ferry Winery
Lakewindr Vineyards
Lakeview Vineyards
Lucas Vineyards
Miles Wine Cellars
Megan David Wine Company
Royal K-dom Springlidge Farms
Sheldrake Pool Vineyards
Swedes Hill Vineyards

Change in Grape Prices 2003 - 2004

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<th>Variety</th>
<th>2003 Average</th>
<th>High</th>
<th>Low</th>
<th>2004 Average</th>
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<th>Low</th>
<th>% Change (2003-2004)</th>
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<td>360</td>
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FINGER LAKES VINEYARD NOTES 2004
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<th>2004 Average</th>
<th>% Change (2003-2004)</th>
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<td>Average</td>
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<td>621</td>
<td>4%</td>
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</table>

| Table grapes      |              |              |                      |                   |
| Herveld           | 450          | 500          | 6%                   | 0                 |
| Lapeirons         | 300          | 300          | 6%                   | 0                 |
| Average           | 376          | 400          | 7%                   | 0                 |

| White Hybrid      |              |              |                      |                   |
| Aurora            | 278          | 315          | 4%                   | 8                 |
| Cayuga White       | 446          | 540          | 14%                  | 9                 |
| Seyval blanc       | 432          | 500          | 15%                  | 9                 |
| Traminer           | 813          | 850          | 12%                  | 7                 |
| Verdelot blanc     | 530          | 530          | 0%                   | 1                 |
| Vital bianc        | 475          | 580          | 15%                  | 11                |
| Vignoles           | 622          | 800          | 19%                  | 9                 |
| Average           | 513          | 668          | 11%                  | 9                 |
| Ave. w/o Traminette| 454        | 544          | 10%                  | 6                 |

| Vidal late harvest|              |              |                      | 4                 |
| Vignoles late harvest| 1250      | 2000         | 31%                  | 1                 |
| Average Late Harvest| 1260     | 2000         | 31%                  | 1                 |

| Red Vinifera      |              |              |                      |                   |
| Cabernet Franc     | 1446         | 1650         | 9%                   | 20                |
| Cabernet Sauvignon | 1564         | 1700         | 5%                   | 15                |
| Gamay Beaujolais   | 1550         | 1580         | 3%                   | 1                 |
| Lemberger          | 1387         | 1600         | 3%                   | 4                 |
| Merlot             | 1812         | 1900         | 7%                   | 10                |
| Pinot Noir         | 1480         | 1620         | 3%                   | 15                |
| Sangiovese         | 1600         | 1600         | 0%                   | 1                 |
| Average            | 1620         | 1643         | 4%                   | 6                 |

| White Vinifera     |              |              |                      |                   |
| Chardonnay         | 1458         | 1800         | 8%                   | 20                |
| Chardonnay (Premium)| 1300      | 1320         | 8%                   | 2                 |
| Gewurztraminer     | 1428         | 1550         | 3%                   | 11                |
| Pinot Blanc        | 1300         | 1400         | 8%                   | 17                |
| Pinot Gris         | 1414         | 1500         | 6%                   | 18                |
| White Reseling (Pen)  |              |              |                      | 10                |
| Average            | 1318         | 1525         | 8%                   | 10                |

NEWSLETTER NO. 10
MARKETING
2005 AGRICULTURAL OUTLOOK

GRAPE AND WINE SITUATION AT HARVEST
Jerry White
Department of Applied Economics and Management

Grape Production. The New York grape harvest was estimated at 145 thousand tons. The short crop is down 25 percent from a year ago, and sixteen percent below average production of the past five years. The reduced crop is due in part to extreme cold weather (temperatures at or below 15 degrees in mid-January in many vineyards in the Finger Lakes) that decimated crop potential in the Finger Lakes and certain hybrid varieties, and placed 20 to 29 percent of the vineyard acreage in the Finger Lakes into a replant situation. The poor 2003 flowering season combined with a heavy crop, resulted in delayed harvest, which also reduced crop potential for hybrids and native varietals. The delay has important implications for growers and winemakers in the Finger Lakes and the Hudson Valley, who also experienced several losses. I will return to this topic at the end of this article with some reminders about risk management strategies that maybe used to protect vineyards against the periodic freeze events that have occurred roughly at 10 year intervals in the last 15 years.

The national grape crop is expected to be 6.4 million tons, down three percent from 2003, and thirteen percent below the huge crop in 2002. California, which accounts for about 50 percent of US production, is down about two percent from last year.

Michigan's production decreased about 14 percent, while Pennsylvania's production decreased 10 percent. Thus the national crop, as well as the eastern crop, is relatively short at a manageable level.

Two years ago, there was concern about the risk of grapes in California from the huge 2002 crop. The last two years of modest sized crops have allayed these concerns considerably. Many observers pronounced that the grape glut for wine grapes has passed, but is far from over, and some are speculating on a looming shortage of wine grapes in California. Over 100,000 acres of grapes in the San Joaquin Valley alone were pulled out in the last four years, removing a significant amount of lower quality wine from the market. Grape prices in the San Joaquin valley increased by 50 to 100 percent. Even Thompson Seedless were bought by winemakers at $2.50 per ton, double the price of a year ago.

The popular low priced wine "Two Buck Chuck" and other "extreme value" wines, at $3 per bottle retail price, continued to boost increased domestic consumption.

The Big Picture - The US and International Wine Markets. Performance in the US wine market is being driven by increased table wine consumption and the super value wines now available at the retail level (Figure 2).

From 1995 to 2001, wine consumption grew at the rate of about 2.6 percent a year. However, in 2002, wine shipments increased 10.4 percent due to increased domestic consumption and the higher quality wine available at the retail level (Figure 2). In 2003, the trend increased even more. The retail distribution channels increased by a remarkable six percent, leading to a recorded 982 million gallons of retail US consumption in 2003.

Figure 1. Total Wine Consumption, 1990-2003

Increased US distribution channels are increased by a remarkable six percent to record 982 million gallons, despite the weak economy. US consumption in 2003 was 627 million gallons, an increase of five percent over the previous year. Import growth was about ten percent in 2003 and now account for over one-fourth of the US market. The increase in imports through 2002 resulted from the strong US dollar, which made imported wines a real buy for consumers. The value of the US dollar in relation to the Euro began to rise in 2002, causing a real deepening of imports. Growth in 2004 and 2005 was in imports will be moderating due to the relatively weak dollar. Countries leading the way (growth of imports) in the US market in 2003 were Australia (+36 per cent in volume), New Zealand (+26 per cent), Argentina (+89 per cent) and South Africa (+11 per cent). Growth in 2005, Italy remains the largest exporter into the US market, and in 2006 it had a six percent increase, keeping us on track with the increases in the total US market.

The US, who expects 25 percent in value to $545 million in volume, to 11.5 billion in 2005, and 29 percent in volume to $91 million in 2006, is forecasted to be the largest market for California wine shipments.

Retail wine sales in the US reached $21.6 billion in '03 (Figure 2). With the growing...
variety. A year ago, wineries and retailers faced their lowest margins in years. In 2005, while competitive pricing is still the norm, margins should be improved.

Finger Lakes Grape Prices. Reflecting the short supply locally, grape prices generally went up for all major categories (Niagara, Hybrid, and V. vinifera). Canandaigua Wine Company, the major buyer of wine grapes in New York, listed price increases of $30 per ton for Aurore, $25 for Delaware, and $15 for Concord. Canandaigua listed slightly decreased prices for Catawba and Elvira. There was an announcement of a cut back in contracted tonnage of several thousand tons of Catawba. The overall average price for native varieties and hybrids, when weighted by volume of purchases, will be slightly higher than last year, although the price for Catawba will be considerably lower due to the cutback in contracted acreage.

Prices offered for Finger Lakes wineries for vinifera grapes were higher than last year for all major varieties, both red and white. The average prices for all vinifera in the state of New York increased for 2004 reflecting the short supply associated with a winter-injury. This will put vinifera prices on an upward track after last year’s substantial decrease (Figure 3). Vinifera prices are likely to remain strong over the next three years, as growers replant to rebuild supply to its previous level and beyond, to reflect increased demand for vinifera. Most growers’ revenues (assuming a mix of American, hybrid, and vinifera varieties), will be below last year, with lower production not being offset by higher prices. Furthermore, with substantial replant costs to replace freeze-damaged acreage, costs will be higher.

It requires over $14,000 total costs including about $10,000 in cash costs to bring an acre of vinifera grapes into full production (White and Pecore). Furthermore, the loss in production capacity will result in lower crops for at least the next three years. Growers with hybrids and native varieties had less freeze damage, and the environment for pricing wine grapes looks somewhat more promising with the reduced supply of grapes in the western US, and the weaker US dollar which is making imported concentrate and bulk wine more expensive.

Small wineries in the Finger Lakes with quality wines and good marketing skills experienced modest sales growth (four to five percent) so far this year. Winery visitation is up slightly. The environment for price increases is tough at the current time, but some wineries have had success in upgrading their product offering by marketing limited production of reserve vinifera wines at higher price points. Many wineries expect slightly increased dollars spent per visitor for the entire 2003 fiscal year. Nevertheless, this was a substantial challenge for the area’s wineries that had been experiencing growth in retail sales of five to ten percent a year for the last several years until 2003. There was disappointment that direct Interstate shipment was not approved in New York. Had the measure been approved, it would have permitted wineries to sell out of state, making their less reliant on sales at the winery. The most immediate challenge for small wineries in the next two to three years will be to sustain modest sales growth while facing the challenge of sourcing grapes for their current product lines, given the acreage that was damaged by the freeze.

Even if wineries are able to maintain their volume, they will experience higher costs and reduced profits for at least the next three years with the necessity to buy more grapes.

Re-thinking Risk Management Practices. It is apparent that freeze damage in 2004 was the major concern of most growers and vintners. What lessons can be learned from the past season? It is perhaps human nature to label such events as isolated occurrences rather than something to be taken into account every year. Yet history teaches us that periodically, a freeze event occurs which causes decimated yields and loss of vines. Figure 4 shows the tonnage of New York grown vinifera processed since 1980, including those grapes grown and out of state. The figure shows clearly the growth trajectory in tons of V. vinifera processed from 1980 through 1994. While we cannot show tonnage for just the Finger Lakes, it amounts to nearly half of the total for the state (most of the rest is on Long Island, and not subject to heavy freeze). The effects of winter damage in the Finger Lakes are readily apparent in the state’s total production in two periods, and the end in the projected total for the 2004 crop.

We can see the impact of the “Christmas massacre” in crop year 1991, when the temperature fell from 32 degrees on Christmas Eve to -20 degrees on Christmas day in 1980. As a result the state’s tonnage of vinifera grapes processed fell by fifty-four percent in 1981, and was reduced for the next two years. Similarly, freeze events reduced crops in 1993 and 1994 by over fifty percent.

We project that about 73 percent of the 2004 vinifera crop in the Finger was lost, and additional tonnage lost in the Hudson Valley will also affect vinifera production for New York. The statewide statistics for vinifera tonnage processed will probably fall by about 40 percent. I estimate that vinifera tonnage processed will be about 2,700 for New York grown grapes (Figure 4).

Figure 3. Average Price of V. Vinifera Grapes, New York State, 1990-2003.


Even though these events have occurred in roughly 10-15 year intervals, we cannot be sure that damage will not occur next year. What options do growers and vintners have for reducing their susceptibility to such events?

(Continued On Page 4)
ITHACA, N.Y. The Cornell University Library has received a $33,742 grant to document the history of the grape growing and winemaking industries in New York's Finger Lakes region. The grant from the New York State Archives’ Documentary Heritage Program will enable the Library’s Division of Rare and Manuscript Collections to identify and survey records from approximately 50 wineries that dot the steep hillsides surrounding Cayuga, Seneca, and Keuka Lakes.

“Our survey will locate the historical documents such as ledgers, account books, diaries, and records that will enable scholars to trace the history of grape growing and winemaking in the Finger Lakes and beyond,” said Katherine Hixson, Curator of Rare Books. “This project is important to the growth of the Eastern Wine and Grape Archive at Cornell.”

This grape plant which is one of several in the Eastern Wine and Grape Archive. It was photographed and colored by Joseph Prentiss. Homestead Image: Amana Society, [ca. 1880]. Provided by the Division of Rare and Manuscript Collections, Cornell University Library.

This photograph from Viander Vine Cellars is one example of the kind of document contained in the Eastern Wine and Grape Archive. Violon Vine Cellars Records. 1914-1925. Provided by the Division of Rare and Manuscript Collections, Cornell University Library.

Cornell University established the Eastern Wine and Grape Archive in 1998 as a cooperative project between the Library’s Division of Rare and Manuscript Collections and the New York State Agricultural Experiment Station in Geneva, N.Y. (NYSAES). The archive contains the records and other papers of several individual growers and winemakers, including the Viander Wine Company from 1867 to 1870; Viander Wine Cellars from 1923 to 1965; and the Hammondsport Wine Company during the Prohibition years from 1920 to 1925, when they struggled to stay in business, and the influential viticulturist Nelson Sholes during the years of his work at Cornell, 1931 to 1936. These and other early growers and winemakers were crucially important to the economic and agricultural development of the region.

Their records could have relevance to scholars interested in viticulture, enology, food, agricultural economics, sociology, cultural history, or labor relations.

The archive makes up one part of the more than 301,000 rare books and 70 million manuscripts and photographs housed in the Division of Rare and Manuscript Collections at the Carl A. Kroch Library, a state-of-the-art special collections facility.

With more than 5,000 volumes on the subject of wine and grapes distributed among Kroch, the Frank A. Leu Library of the NYSAES, the Albert R. Martin Library, and the Nysel Library of Hotel Administration, Cornell now has one of the best concentrations on this subject in the country. Nevertheless, according to university archivist Elaine Engle, "There are gaps in the history of New York State grape growers and wine-makers that are under-documented. Despite the slow and steady growth of the wine industry in New York over the past century, and the explosive growth during the last decades of the 20th century, no other New York institution has been able to preserve and record the production and operation of wine." She said, Support and early direct money for...
Grape and Wine Situation at Harvest
(Continued from page 7)

1.) Risk management starts with site selection. Lower elevation sites, close to the lakes, with good air drainage and well-drained soils are preferred. Of course this recommendation has to be tempered with the reality that many existing varieties and vineyards are already committed to less than ideal sites. In these cases, buying or leasing superior sites away from the home base, or contracting with growers on superior sites and with varieties that fit the winery’s marketing plan, are options that should be considered. Even estate wineries may have production sites some distance away from the winery, so long as production practices are under the winery manager’s control. Well-drained sites are important, so new plantings should be preceded by installation of tile drainage. In our test cost of establishment study, the cost of tile drainage at 27 foot intervals, was estimated at about $1,400 per acre, but can vary considerably from site to site (White and Pisoni).

2.) For new varieties to plant, or varieties to lease or buy-in from local sources, emphasize cold-hardy varieties that fit your marketing plan. This season, Viognier demonstrated its susceptibility to our harsh winter, while Riesling and Cabernet Franc withstood the severe winter better. However it is the marketing plan that should drive varietal selection rather than weather, whatsoever limits. A winery that has been successful marketing a particular varietal wine at higher price points cannot readily abandon the variety. In this situation, looking to contract for grapes or leasing a superior site should be considered.

3.) Cultural practices can be used to limit susceptibility to freezes. One of the main ones to consider is tilling up soil around the graft union in the fall, and takedown in the spring. These tillage operations were estimated to cost, respectively, $36 and $62 per acre for labor and machinery in the 2001 cost study (White and Pisoni). While this is a substantial cost, it should be looked upon as a form of insurance, or an expenditure to help mitigate damage from a large loss that happens infrequently.

4.) Multi-peril crop insurance (MPCI) is another risk reduction tool that affords protection from winter damage as well as damage from other weather related-events such as drought, excess moisture, improper application of fertilizers, frost and wind; and wildlife, insect and disease damage (but not damage due to insufficient or control methods). Additional insurance alternatives include Adjusted Gross Revenue (AGR) or AGR-Lite policies which offer protection against price as well as yield risk by insuring revenue based on the average gross revenue of the preceding five years. Grape farms with wineries cannot insure the value-added revenue derived from processing grapes into wine). AGR and AGR-Lite can be used together with MPCI in a way that coordinates indemnity payments and premiums. Premiums are substantially subsidized by the federal government for both MPCI and AGR. While details cannot be adequately covered in this article, there are several meetings planned for Central New York from now until mid-January to inform you about these policies. Growers should keep in mind the sign-up deadlines of November 20 for MPCI and January 31 for AGR and AGR-Lite.


BILL WILSEY APPRECIATED

We were fortunate to have Bill Wilsey on our staff for the past year and a half. Bill did a great job in a number of different tasks for the program. These included data collection, compiling e-mail Vineyard Upstarts, completing the winter injury survey, and, last but not least, maintaining a presence in our office during my leave. Bill was able to use his 30 years experience as a technician at Geneva to accomplish all these tasks and more. We wish him the best.
 Shoot number was sharply reduced in some vineyards due to cold-related bud mortality.

Winter injury decimated some vineyards in 2004.

Many vineyards had standing water in mid-July.

Filled up vineyards may have had no crop, but most had vigorous growth from suckers at the base of the vines.
Vines continued to collapse in mid-season due to trunk injury.

Downy mildew defoliated shoots by mid-September in some vineyards.

Crown gall appeared in mid-summer on injured trunks.

Magnesium deficiency, related to excess moisture that favored potassium uptake, was common in 2004.
Several research programs at Geneva and Ithaca carry out projects and experiments in area wineries and vineyards. This allows them to complete applied research that would be difficult to do in Experiment Station vineyards. Here are brief descriptions of projects that have taken place over the past year with the assistance of industry cooperators. We appreciate the extra effort made by growers and wineries to support ongoing research projects in the region.

Optimizing foliar and soil nitrogen applications to improve yeast available nitrogen and reduce atypical aging of wine. Liliang Cheng, Horticulture, Thomas Henrick-Kling, Food Science, and Tim Martinson. We are testing combinations of foliar nitrogen application around verison with soil nitrogen application before and after bloom to optimize nitrogen management in vineyards with an objective of increasing yeast available nitrogen and reducing atypical aging of white wine varieties. Nine treatments have all possible combinations of foliar nitrogen application (0, 6 or 9 times) and soil nitrogen (0, 25, or 50 lbs). Yields will be made and evaluated by the Cornell Enology program. Cooperators: Gene Pierce, Glenora Wine Cellars, Ken Mansfield, Norbud Farms, Hector, NY.

Enology Program Cooperative Trials, Thomas Henrick-Kling, Dragana Dimitrijevic, Food Science and Technology, Geneva. The Enology Program has several ongoing trials on winemaking techniques with several Finger Lakes cooperators.

- Evaluate fermentation options / wine styles with Cabernet Franc Shelurak Point Vineyards
- Heating trials (must and wine) for flavor comparison Swedish Hill Vineyards
- Yeast strain comparisons. Gallucci Family Wineries, Swedish Hill Vineyards
- Heat and UV treatments to control Brettanomyces. Fox Run Vineyards

Fertilization and no nitrogen. Crop weight, juice quality, and pruning weights are being compared, along with soil attributes. Funded in part by the NYS Energy Research and Development Authority. Cooperators: Bill Dalymple.

Managing vine vigor and improving red wine grape quality with reflective geotextiles and composted bark mulch. Ian A. Marwin, Dept. of Horticulture, Greg Hostetter, Graduate Research Assistant, Timothy E. Martinson. We are studying the effects of composted hardwood bark mulch, reflective white geotextile mulch, and a black geotextile mulch on red wine grapes in three Finger Lakes vineyards. Our goal is to advance wine grape maturity and improve varietal flavor by increasing sunlight and heat on the berry clusters, and suppressing weed growth and nutrient competition at critical times of the growing season. The projects are partially funded by the Eastern Viticulture Consortium and NYS Wine and Grape Foundation. Cooperators: Richard Figiel, Silver Thread Vineyard; Dave Wiernman, Shelurak Point Vineyard; John Wagner, Wagner Vineyards/Winery.

Spray Timing and Vineyard Floor Cleanup for Grape Cane Borer Control. Tim Martinson, Bill Winesy, and Greg English-Loeb. Spring sprays of Danitol and Sevin were applied to try to control grape cane borers. A portion of the vineyard was cleared of dead branches, thought to be attractive to egg-laying adults. Efficacy will be evaluated in the fall. Cooperator: Bill Dalymple.

Evaluation of potential new wine grape varieties. B. Reich, S. Luco, and T. Henrick-Kling. Cornell grape breeding program selections have been planted for trial purposes at numerous vineyards in upstate New York. Experience with these new selections and feedback from grower-cooperators help to determine the relative merits of a group of elite selections across a range of area sites. Cooperators: Lakewood Vineyards, Swedish Hill Vineyards, Hunt Country Vineyards, Graffiti Grapevine Nursery in the Finger Lakes, Double A Vineyards, Columbia Wine Cellars, John Moorehead and the Lake Erie Regional Grape Research and Education Center in the Lake Erie Region.

Evaluation of the effectiveness of different sprayers at penetrating a fruit canopy. Andrew Landers & Bruce Whitham, Ag Engineering Geneva. These visits looked at the effectiveness of the LIPC modification of the Lindholmen M30 sprayer and the GreenTeach sprayer at Fox Run vineyard. We looked at the effectiveness of the sprayers at improving deposition. We studied the effect of mechanical improvements at changing sprayer speed and direction on the Paris-3 row trailed sprayer at Glenora vineyards. Both sites provided varying canopies into which we applied a fluorescent tracer and under an ultraviolet light we could clearly see deposition. Cooperators: John Kaiser, Fox Run Vineyard, Jeff Morris, Glenora Farms.
Evaluation of the effectiveness of a third fan sprayer, Andrew Lamers & Bruce Wadahms, Ag Engineering, Geneva. A number of trials were made to Pulaski City to see the influence of vineyard size on spray coverage. The trials were made using the new Monogram vineyard sprayer. The goal was to find three fans to provide a 1$m$-sized area of coverage that is equivalent to a 3$m$-sized area of coverage using a single fan. The results showed that the three fans provided a more uniform coverage than a single fan, with less variation in coverage between different parts of the vineyard.

Management of Grape Crown Gall by Cultural and Biological Means. Thomas Dunn, Jodi Creasy, Cheryl Reid, Farshad Zadeh, Geneva. A study was conducted to determine the effectiveness of a combination of cultural and biological practices in controlling grape crown gall. The treatments included the use of neem oil, mycorrhizal fungi, and a biocontrol agent. The results showed that the combination of treatments was more effective than any single treatment in controlling grape crown gall.

Determining whether European red mites are serious pests of grape in the Northeast. Jan Novy, E. L. Johnson, and Martin Gottlob, Horticultural Sciences, Geneva. We have observed that European red mites are occasionally found in grape vineyards in the Northeast. The objective of this study was to determine if these mites are a significant pest of grape in the region. The results showed that European red mites are not a significant pest of grape in the Northeast, with no consistent damage observed.

Another strategy that is being tested for controlling crown gall is through the use of a biological control.

Field trials were established to test the biological control bacterium. The trials were conducted in previous years with the same results. The bacterium was applied to the soil in the fall, and the vineyards were monitored for the following season. The results showed that the bacterium was effective in controlling grape crown gall.

Quantifying and Optimizing Vine Crop Load. Alan Lake, Michelle Marques, (grad student) and Robert Pool. The optimal loading of grape vines requires an annual crop in balance with the ability of the vine to support full replenishment of the leaves before the end of the season. Current experiments at Fox Run and Anthony Road are focusing on how best to define just what is the capacity of different Cabernet Franc and Riesling vines and vineyards to support level development with vine capacities and cropping levels. Ultimately, we will be making wines with the help of Thomas Henrick-King to relate wine sensory quality to test "crop load" expressions as predictors of wine quality. If successful, this will help growers to optimize ripening and quality by matching their crop levels to the capacity of each vineyard to give the best yields of the desired quality. Coordinators: Fox Run Vineyards: Anthony Road.

Stimulating Earlier Wine Grape Ripening. Robert Pool and Alan Lake. Since we have a short season, we often struggle with ripening later varieties like Riesling and Cabernet Sauvignon. We are testing a new formulation of natural vine hormone, abscisic acid, to see if we can trigger ripening earlier in the summer for late-ripening varieties. We hope to be able to ripen these high-quality varieties in warmer and more consistent conditions for better and more consistent quality as well as better hardening.

Evaluation of Two Fungitoxin New Pre-emergence Herbicides for Vineyards. Rick Duns, Andy Silliman, Mike Vercato. Two pre-emergence herbicides are being evaluated for their potential use in vineyards. Chateau® (flumioxazin in the active ingredient) recently received federal registration. New

(Continued on page 16)
Good weather in September has helped to make up for our below-average weather in July and August. By and large, ripening should not be a big problem if the vines have functioning leaves for the next couple of weeks or longer.

The biggest risk has happened with grape pricing. Cash market prices were very interesting. We had two of the major processors increase prices to the $240-245 per ton range. Two major processors dropped prices to $145 per ton at 16° Brix. I can’t think of a time when the major processors had that large a price gap. This was a surprise since we had heard $200 a ton prices for California grapes used for concentrate. Ciffarato hosted a meeting for their growers on August 30th and explained their position. One message that came across loud and clear was that Ciffarato growers needed to be able to produce grapes for around $150 per ton for the foreseeable future. This will be very difficult for many juice grape growers in NY and PA.

2004 yields will be lighter than average but better than first estimates.

2004 Growing Season
(Continued from page 3)

Crop. VNeurose is down in all categories of grape varieties. By Category:

- Natives. Major processors are estimating an average of about 4.0 T/acre, about 1.7 T below average for Concord. Nationwide, Welch’s Niagara crop came in above original estimates, but down by 20% from last year’s record crop. However, the Finger Lakes Concord and Niagara crops have tended to come in below estimates, while the Lake Erie region crop has come in 15-20% lower than expected.

- Hybrids. Whites are down by about 50%, and reds by 70%, according to processors. Both were affected by significant winter injury, and also by heavy rainfall during the critical ripening period. As most ripen before Concord and V. vinifera, the rainfall caused significant cracking and fruit breakdown. Many growers reported half a crop in Aurora, Steuben, Cayuga, and Hermann’s, Black and Rousgeon were heavily affected by rainfall, and some blocks were harvested early as a result.

- V. vinifera. Our initial estimates for this season were 0.8 T/acre, but we have heard reports from other regions that the yield is much lower than expected. Many growers were affected by winter injury, and the crop was further reduced by heavy rainfall during the critical ripening period. As a result, the yield is estimated to be around 0.5 T/acre.

Overall, we may average about a ton per acre across all the wine grape acreage. Many wine grape growers will substantially recover next year (if we don’t have repeat winter injury), but the number of missing vines in mature vineyards put an upper limit of about 50% of ‘average’ to next year’s crop. This may be offset by an estimated 50-70% increase in new vineyards that will start to produce fruit in 2005.

Crop Value. If the above estimates are accurate, prices like those in the Finger Lakes will be about $20,000 T, or about 60-65% of an average crop. When weighted for different types of wine, the crop value would go from $15 million to $8.7 million (55% of average value).

Winemaking. This season provided another reminder of how valuable sunshine and warm weather are during the ripening period. After vinification, we have enjoyed ideal ripening conditions, despite the wet summer. Winemakers report maturity and good flavor development, with acids and pH in the appropriate range for our last year, with higher acids across the board, but lower sugars. Concord, because of the ripening conditions and light crop, are coming in at brix levels in the 17°-18° range last year when growers struggled to reach minimium brix standards.

(Continued on next page)

FINISH LAKES VINEYARD NOTES 2004
2004 Growing Season
(Continued from page 14)

Outlook. For natives, I think the vines will be set for a larger crop next year, with higher bud fruitbears. Warm weather through bloom and at the end of the season should help vines store reserves and attain better winter hardiness than they had at the end of 2003. Many hybrids, if they escaped trunk injury, should also be set for a larger crop for the same reasons.

For ‘Y’ varieties growers, next year will be a ‘rebuilding’ year, with significant trunk renewal and vine replacement, which will continue into 2006. Some vineyards (with graft union pathology and vigorous seeded shoots) need to be close to a normal crop while others will have significant gape to fill in their vineyards. Some Deseeded growers will be faced with decisions about what (or if) to replace this variety with, given amount of winter injury and tomato ring spot incidence in vineyards.

The future. It is clear that this season has left both growers and wineries with lowered returns are somewhat weakened financial status. Crop insurance will help, as will disaster assistance programs, recently approved by Congress. These programs will cover insured and uninsured crop losses for 2004 (for those with a crop <35% below average) and, with the Title Assistance Program, may also provide 75% cost sharing for vine replacement (about $500 per acre by my calculation). I urge all growers who have suffered losses to contact their local USDA FSA office to report your losses and find out if you might benefit from these programs.

We move into 2005 with growers facing many crucial decisions about their operations. My hope is that wineries and growers will work together to consider how they might use this disaster to upgrade and improve our Finger Lakes’ vineyards. This premium wine industry has built up a reputation and a robust demand for their products, and there are opportunities for growers to expand in this area to meet future demand. On the bulk processing side, Canandaigua, National Grape, Royal (and Bully Hill) remain committed to the region and constitute the largest market for our grapes.
We think we have it tough, but can you imagine operating a vineyard where the temperature goes to -39° F? A group of northern grape growers heard a report from a viticulturist of Quebec, Canada who not only experienced that temperature in January, 2004 - he reported that both he and his vines suffered little, if any, cold injury. Experience of other growers from Minnesota to Maine were shared at a two-day conference co-organized by Ken Jungersen of Cornell Cooperative Extension and growers along the St. Lawrence Seaway and Lake Champlain in both New York and Vermont. The conference was held in Plattsburgh, NY last July and included tours of two commercial vineyards and tasting of wines produced in the region. A substantial number of growers from Quebec participated.

Although grapes have been grown in these areas in the past, growers have usually depended on same or nearby vineyard to avoid winter kill. In Minnesota, growers decided they needed something better and persuaded their legislators to fund a grape-breeding program at the University of Minnesota to produce “fully cold hardy” wine grapes. Peter Heinsward of University of Minnesota shared the results of this endeavor. The program didn’t quite have to start from scratch, because a Wisconsin dairy farmer named Elmer Swenson, who had been breeding grapes for many years, had his collection available. Building on this start, several new varieties have been named and more are scheduled for release soon.

In Quebec, the growers are betting on ‘Sabrevois’, a red wine variety from Minnesota. We tasted ‘Sabrevois’ wine along with commercial examples of ‘La Crescent’ (a white) and ‘Frontenac’ (a red). The wines were every bit as good as its most French Hybrid acts from the Finger Lakes, and in my opinion, test wines from unnamed selections were better than 85% of the red hybrids I have ever tasted. Although the effort is in its infancy, northern New York growers are working together to establish a wine industry. If we can prove that these wines will be delicious (I have now tasted 24 wines from 14 wineries) we do not feel the wine will be the only product that will be successful.

More information about the Minnesota varieties can be found at: http://www.mngrapes.com/. A very enthusiastic Canadien has put together a lot of information on CCAC country viticulture at http://www.littletafwino.com/

Ken Jungersen has organized a mail list for those interested. Subscribe at: Cold Country Viticulture List <cold-country@viticulture-ls.cornell.edu>

Cooperative Research and Demonstration Projects in the Finger Lakes
York State registration is pending. Chateau and Delaware are broad-spectrum horticides that control most common annual weeds. In some cases season-long weed control at not obtained at the maximum use rate, so we have worked with the product manufacturer to develop a method for their use that permit split applications under heavy weed pressure. Studies being conducted in Fied organization indicates newly planted Concord vines are susceptible to injury from Chateau application, even when the vine is protected with a growth regulator. This is somewhat surprising since many studies in California on other varieties have not shown similar injury. In 2004 we began evaluation of Matrix (flumetrionil, the active ingredient), vineyard registration is not expected for at least two more years. Cooperators in 2004: Bob and Dawn Bista.

Antioxidant and Anticancer Activities of New York State Grapes and Wine, Dr. Rui Hai Liu, Dept. Food Science, Cornell University. We will study the health benefits of 8-12 common wine grape varieties by measuring levels of antioxidants and anticancer compounds in juice and wine after fermentation. Funded by the NYS Department of Agriculture and Markets and the New York Wine and Grape Foundation. Cooperators: Sayre Nancy, and Steve Fulkerson Fulkerson Winery and Juice Plant.
May 20: Surfing Pest Management Update and Barbecue. Our annual pest management update will be held at Casto Vineyards, Dresden Farm. It featured updates on DEC regulations, disease, insect and weed management. The meeting closed with the traditional barbecue, sponsored by industry and vendors by Canadensis Wine shaft. Participants: Ed Handrich, NYS DEC; Greg English-Looch (Entomology), Wayne Wilcox (Plant Pathology); Jared Carroll (NYS IPM program), Regina Reichenthal (Valent); JoJo Buhaly (Biogents), Charlie Smith (CAIP northeast), Dave Pieczarka, (Cornell), and Canadensis Vineyard Crew led by Tim Moore and Dan Cimarelli.

June 9: Grape Disease Assessment Meeting. Co-sponsored with the NYS State Winemakers Growers Association and Farm Bureau, Logan Ridge Winery. Early growers meet to discuss and determine what assistance, if any, needs to be sought for damage to grapes in the Finger Lakes. Growers spoke about damage estimates on their vineyards as well as what climate assistance, if any, Farm Bureau and the Wine Grape Growers Assn. should seek. Growers highlighted issues about crop insurance, discussed seeking assistance through the Tree Assistance Program (TAP), and discussed the need for a regulated New York Wine Grape Growers Assistance. Jim Martino, Cornell Viticulture Extension, gave a Plant vs. Logon Ridge/Glentana hosted the meeting and provided a wine tasting and refreshments.

June 22: Mock Worker Protection Standard Inspection. Personnel from the 1970 DEC provided training to grape growers on specific topics to take to be in compliance with the worker protection standard regulations. Growers passed through 3 different stations covering the Central Foulding area, worker training, and decontamination exercises. Goal was to educate growers in advance of inspections, which took place later in the season. A brief discussion of winter injury was held after the inspection, and a barbecue hosted by Anthony Road followed the meeting. Participants: Ed Handrich, Anthony Lemon, Glenn Reinhardt, Michael Seferis, Martin Williams, New York State Department of Environmental Conservation Bureau of Pest Control, Peter John, and Anne Martin of Antrim Door Winery.

July 26: Cornell Centennial Fruit Field Days. Cornell University hosted the Centennial Fruit Field Days and Equipment Show at the Fruit and Vegetable Research Farm, the New York State Agricultural Experiment Station in Geneva, NY on July 27 and 28 from 8:00 a.m. - 4:00 p.m. Fruit growers, consultants, and industry personnel viewed field plots and learned about the latest research and extension efforts being carried out by researchers on the Geneva and Geneva campuses. The focus was on all commodities key to New York’s $300 million industry: apples, grapes, raspberries, strawberries, pears, peaches, cherries, and melons. Participants on Grape Days: Bob Pool, Terry Gates, Jared Carroll, Laverne Lenders, Wayne Wilcox, Greg English-Loch, Bruce Reisch, Lawrence Cheng, and Alan Laskin, Terrence Rochmels, Horticultural Science, Geneva was the chair of the organizing committee.

August 10, 11, 12, 2004: Empire Farm Days. The Finger Lakes Grape Program, New York State Woman for Wine, NYS IPM program and NYSWine Growers. Participated in exhibits at the grape center at Empire Farm Days. Exhibits, wine tasting, and several presentations on crop insurance were featured. Participants: Donna Orchard, NYSW Women for Wine, John Masters, NYS Wine Grape Growers, Susan Spencer, NY Wine and Grape Foundation, Tim West, Lake Erie Regional Grape Program, Jared Carroll, NYIS IPM Program.

August 10, 2004: Detailed Crop Insurance Meeting for Grape Growers. Representatives from the Crop Insurance Education Group (Charles Koenig) and also Companies that sell crop insurance were on hand to present detailed information about crop insurance for grape growers and to field questions. The Value CS USA Farm Services Agency administrator presented information about low-interest loans for growers suffering crop and vine losses. Farm Bureau representative Mark James gave an update on legislative and farm bureau initiatives related to securing disaster assistance. Participants: Charles Koenig, Risk Management Educator, Phil Morehouse, Yates/Steuben County FSA Director, Steve Van Voshaar Farm and County Insurance, Mark Jones, NYS Farm Bureau. Meeting co-sponsored by New York Risk Management Agency and the Finger Lakes Grape Program.

August 24: Demonstration of Bar-coding scanning software for Cost-plus Vineyard Management. Bar-coding scanners are routinely used for tracking products through the wholesale chain to the point of retail sale. A growing application is the use of this technology to track crops in agriculture. Pat Trail of 1-3 technologies (a company out of California, website www.13tracking.com) demonstrated the bar-coding scanning software. Tim Moore of Constellation made the contact with this company. Participants: Pat Trail, 1-3 Technologies, Tim Moore, Canadensis Wine, Darrin and Nett Estlacement held a meeting in Darrin’s shop on Finger Rd.

September 2: Senator Hillary Clinton’s visit to Lakewood Vineyards. In a meeting organized by Tom Cavenagar of National Grape Cooperative, Growers discussed weather issues and the need for disaster assistance for winemaking. They showed Sam Cornvines with reduced crop, downed and, and winter injury. National Grape Cooperative representatives Tom Daniel, Leonard Poggio, Dan Dolson (CEO of Welch’s) and Randy Graham (Chair of the National/Welchs board) visited the vineyard and part in planning disaster assistance in 2002 (following a killing freeze) and urged continued support for the value added export program that benefits Welch’s. In a current up export markets for Senator Clinton pledged support for crop insurance solutions for perennial crops such as grapes and continued support for the export program. Participants: Tom Cavenagar, National Grape Cooperative, Jim Harold, Mark Wagner, Darrin Rak, Dan Dolson The Staph and Family and Lakewood Vineyards hosted the meeting.
What started out over three years ago as a grower-led initiative to help grape growers in today’s global market has finally reached fruition with 368 grape growers in the Lake Erie and Finger Lakes regions successfully completing 200 hours of computer training.

The purpose of the project was to provide grape growers with the basic computer skills necessary to comply with the new standards being implemented by grape processors, and to assist the growers in developing more advanced tools that will be required of them in an increasingly global industry where access to information can be the key to remaining profitable.

The project had three goals:

1) Grape growers will obtain the basic skills necessary to use a computer as a vineyard management tool in communication and record keeping.

2) Grape growers will obtain the basic skills necessary to communicate with processors via e-mail and the Internet.

3) Grape growers will become proficient in Microsoft Excel in order to take advantage of TracGrape, new pesticide record keeping software being developed by a grant from the NY Wine and Grape Foundation.

To reach these goals, instructors from Jamestown Community College and Finger Lakes Community College conducted 200 hours of classroom and hands-on computer training. They taught classes in Windows Foundation, File Management, E-Mail and related topics (calendars, to-do lists, etc.), World Wide Web/Internet Skills, spreadsheets, word processing, record keeping and bookkeeping. Classes were designed to allow for as many growers trained as possible while providing the amount of individual attention needed for beginning computer users.

Class size was small, with 8 to 12 growers at a time. Participants enjoyed the fact that they were taking classes with their peers. The information presented had a grape related theme when possible. Table 1 shows a breakdown of training by class and number of participants.

Evaluations completed by course participants at the end of each course offering are another indicator of the project’s success. One of the major goals of this project was to provide basic computer training to grape growers. We hit this target audience as a majority of course participants rated themselves as beginner (68%) or intermediate (28%) computer users. Ninety-eight percent of participants felt the training met the course objectives while 66 percent either strongly agreed (37%) or agreed (49%) with the statement “I feel more prepared to meet the new computer standards being set by the processors.” Only one percent of participants felt that they were not better prepared after taking the course.

Many organizations collaborated in putting this project together. A committee consisting of grower representatives from the Viticulture 2000 and 2003 program committees, Canandaigua Wine Company, National Grape Cooperative, the NYS IPM Program, and both the Finger Lakes and Lake Erie Regional Grape Programs worked with Jamestown and Finger Lakes Community Colleges to plan these courses. Funding ($28,000) was provided by the Viticulture 2000 and 2003 committees, a SUNY Community College Workforce Development Training Grant received by the Jamestown and Finger Lakes Community Colleges, and the New York Wine and Grape Foundation.

Many of the participants in the project have expressed an interest in being able to take more advanced computer training. While we are not in the position to continue to provide free training at this point in time, the committee has been holding conversations about how we can continue similarly styled training at a minimal cost for growers. We are currently developing a survey to determine the need for future computer training and the types of classes that are wanted.
ENOLOGY

DRAVAGA DIMITRIJEVIC JOINS CORNELL
ENOLOGY PROGRAM
Joe Cigrandick, Communications Services, NYSAES

GENEVA, NY: Cornell University has appointed an extension enologist in the Food Science and Technology Department at the New York State Agricultural Experiment Station in Geneva, NY. Dragana Dimitrijevic, who is a native of Belgrade, Yugoslavia, joins a team of 39 viticulturists and enologists engaged in teaching, research, and extension work related to grape growing and winemaking.

"I was introduced to the art of winemaking in early childhood because it was a part of my family tradition," Dimitrijevic said. "My lifelong interest in this area has evolved into a rewarding career."

After receiving a B.A. in food science and an M.S. in the technology of alcoholic beverages from the University of Belgrade, Dimitrijevic took the opportunity to work and cooperate with some of the leading world authorities and companies in the field of enology. These included: NAVP Company, an organic winery in Belgrade; Bordeaux University's Institut d'Oenologie in France; several Napa Valley wineries, and numerous instruments; and Sell-Ingen Werke, a German supplier of filtration equipment to the wine industry.

Dimitrijevic also has production winemaking experience with a major California winery. From 2001-2002, she worked as a cellar master at the Brixosum Hill Winery in Paicines, CA, an employment experience she considers particularly significant.

Dimitrijevic came to the U.S. by way of Canada, where she worked for Ontario's liquor control board. There she helped regulate alcoholic beverage production, processing, and quality control as Ontario's provincial analyst.

New York is the third-largest grape and wine producing state in the U.S., with over 200 wineries. Cornell recently established an undergraduate program in enology and viticulture in the College of Agriculture and Life Sciences in response to industry demand for individuals with a high degree of training in the science and application of grape culture and winemaking.

"At this point in my career," Dimitrijevic said, "I regard the position here in Geneva as an extraordinary opportunity to combine my scientific knowledge, research, and professional experience — along with a little intuition and inspiration — to enhance and improve the winemaking efforts at the Experiment Station and at Cornell."

SCIENTIST JOINS USDA GRAPE GENETICS TEAM AT GENEVA
Joe Cigrandick, Communications Services, NYSAES

GENEVA, NY: Amanda J. Gams has joined the staff of the USDA-ARS Plant Genetic Resources Unit (PGRU) with a joint appointment in the department of horticulture at Cornell University at the Agricultural Experiment Station in Geneva, NY.

Gams, a Cornell graduate with a Ph.D. in plant breeding, will work on grape functional genomics. "Experiences of functional genomics might include how one leaf communicates with others, or how a plant responds to stress in the environment to, in turn, overcome it," said Gams. According to Gams, the diversity expressed in the genome of a grape is a record of "its history." She notes that a grape's genome record can provide clues to which grapes have been especially important in the survival of a particular plant species, how grape species in the Americas have diverged from those in Europe and Asia, and perhaps how the genome might reveal unique adaptations.

"We are extremely delighted to have Amanda join our group," said Charles Simion, the research leader/super visory genet list at PGRU. "The critical mass of the grape genomics group at Geneva is definitely building, and she is already fitting in perfectly with the rest of our scientists."

The PGRU was formed in 1986 and has national responsibility to acquire, maintain, characterize, evaluate, document & distribute the genetic resources of certain vegetable crops, as well as apple, tart cherries, and solid hardy grapes. The four scientists involved with grape improvement at the PGRU and collaborate with more than 20 others at Cornell who research grape breeder, cultivation, crop protection, and enology.

Gams received her B.A. in religion from Oberlin College. After a circuous route of internships on farms in Virginia, Minnesota, and Arizona, she also developed a desire to work with plants. Her interests led her to the University of Washington where she earned a B.S. in botany in 1997. She was subsequently accepted into the graduate program in the plant-breeding department at Cornell.

"The initial goals of my research are two-fold," Gams said. "I want to take advantage of the diversity maintained within the genetic resource collection in order to improve grape quality, and I hope my research will advance our basic knowledge of grape physiology."
November 19, 2005
Strategies in Response to Low Grape Prices.
8:00 AM-4:00 PM
Jamestown Community College, Dunkirk, NY.
One-day workshop organized by Lake Erie Regional Grape Program in response to $145/ton Concord prices announced by Cliftfer and Carriage House. Program will focus on possible responses to this major change in the juice grape market. Register with Linda Aures by e-mail at laures@retsync.net, or by phone at (716) 872-5296.

January 25-26, 2005
Unified Wine and Grape Symposium,
Sacramento Convention Center,
Call 800-630-1498 or www.unifiedsymposium.org

March 4-5, 2005
55th Annual Finger Lakes Grape Growers Convention and Trade Show,
Waterloo Holiday Inn, Waterloo, NY.
Details in upcoming Vineyard Notes. 315-538-6054 or www.fruit.cornell.edu

March 21-24, 2005
Winerye Unlimited,
Lancaster Host Resort & Convention Center,
Lancaster, PA.
The industry’s largest trade show in the East. Information at: www.wwr-online.com. Or 800-535-0670

March 24, 2006
Lake Erie Grape Growers Convention,
Fredonia State University, Fredonia, NY.
Call Linda Aures at 716-672-6916

Finger Lakes Grape Program
Cornell Cooperative Extension
110 Court Street
Penn Yan, New York 14527

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