The 2004 growing season was marked by winter injury, wet weather, and sharply reduced yields across the board. When revised New York Agricultural Statistics Service data from the 2004 crop season was finally released in July of this year, the total Finger Lakes crop was estimated at about 20,000 tons (adjusted downward from the unavailable 36,000 tons listed for Niagara to about 3000 T, more in line with the historical 5,000 T Niagara crop in the Finger Lakes) - down from 43,000 T in 2003. Native American varieties were down by 29%, hybrids by 41%, and V. siniensis by 43% from 2003. As we moved into 2005, the question on many growers' minds was how would this affect the 2005 crop?

At the start of the growing season, we knew that 2005 would be - at best - a recovery year. Two hundred or so acres of vinifera vines were killed outright. A much larger number of acres needed trunk replacement. Some of the hybrids - notably Dechaunac, Baco Noir, Cayuga White, Aureo, and Traminette had significant bud and trunk injury. Niagara had also had significant trunk injury and vine collapse in '04.

Winter lows (Figure 1) got down to the same territory in 2005. An early subzero episode occurred in mid-Decembelr with temperatures in the -0°F range. Then temperatures dropped to -16°F on January 20 and 21, preceded by a week where temperatures hovered around -32°F. As in 2004, coldest temperatures were in the north. More southestern sites went down to -27° to -29°. This was a similar scenario as '04, but with different results. This time, growers - almost without exception - had protected the graft union by killing up vineyards. We didn't see wholesale vine deaths this year, but the lows resulted in bud injury and compounded trunk injury in vines weakened in 2004.

Figure 1. Daily high and low temperatures at Geneva, October - May during the winters of '03-04 and '04-05.

Continued on page 2
The mid-December cold event may have been as crucial as the January one. Part of the process by which vines gain maximum cold-hardiness is through dedication in response to freezing temperatures. This process takes time. All else being equal, a December freeze can be worse than a January freeze, because vines haven’t reached their maximum hardiness levels. Seeing all the frost injury on Cayuga White and Traminette this spring makes me wonder whether the December event was the major culprit behind it.

Temperature and rainfall. The season started out with a very cool May, with bud burst around May 30. Some areas were hit with a partial bud-killing frost on May 13, with shots at 0.1 inch, and lows ranging from 24 to 30 degrees F. Given the length of the sub-freezing temperatures (6 hours), it was amazing that this event seemed to knock out only 10-20% of buds that had pushed.

Around June 1, things heated up and stayed hot (Figure 2). Bloom arrived a few days late. By the end of September, we had accumulated 2800 growing degree-days -400 more than average - making this the hottest growing season since 1991, and the 2nd warmest in the last 31 years.

It was a dry year - but some parts of the Finger Lakes were drier than others. Figure 3 shows the cumulative deviation in rainfall.

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2005 FINGER LAKES GRAPE PROGRAM ADVISORY COMMITTEE MEMBERS

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

Ontario County:
- Rich Jones, Naples
- John Ingle, Bristol
- Seneca County:
- Cameron Hounsome, oxid
- Bill Dalrymple, Lodi

Schuyler County:
- John Santors, Hector
- Phil Davis, Hector

Steuben County:
- Ron Fenn, Pultney
- Mel Goldsman, Hamburg

Yates County:
- Jim Bedient, Branchport
- Harry Humphreys, Dundee
- Processor representative: Tim Moore, Canandaigua Wine Co.

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FINGER LAKES VINEYARD NOTES

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Finger Lakes Grape Program
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Area Extension Specialist
Finger Lakes Grape Program

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Communications Services
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from average the line at zero represents the long term average in 2004 and 2003 at Geneva, and in 2003 at Valais. Following a 1.5 in rain in mid-June, Geneva got another inch at the end of June, but Valais did not. After July 4, there was very little rain until Katrina disturbed the 2 to 4 inches on the region at the last end of August. Remarkably, the Geneva data shows about average precipitation; while Valais had a 5-inch deficit by the end of August. September was again dry (BHA missed the finger Lakes), and the harvest season up until October 6 was as close to ideal as one can hope for.

Drought stress. The dry growing season reduced disease pressure following bloom, but also severely affected vine growth and the maturation process. Despite the warm weather, variation didn’t seem to come much earlier than normal, and berry size at the midseason 1200 degree-day point was 20% or more below average. Vineyards south of a line from Lodii over to North of Dresden showed severe drought stress, as did most Keuka Lake vineyards. Vines in gravelly soils in the banana belt south of Seward to North Hamilton also seemed to be the most severely stressed, with restricted shoot growth, yellowing leaves, and shriveled berries in some vineyards. Vineyard in the north had low to moderate water stress.

Katrina brings relief. Katrina changed the picture, and may have rescued vines just in the nick of time. Most blocks went on to ripen normally although early season stress is sure to load to ATA symptoms in some white wines, and the sudden influx of moisture brought berry size closer to normal. That plus ample sunshine and heat through September resulted in rapid accumulation of sugars.

Katrina also led to a late-season resurgence of downy mildew in mid-September. While we’re not seeing the level of vine defoliation that we saw last year, it’s clear that some growers missed this late-season surprise and were reawarded with lots of downy lesions on their leaves as a result.

Winter Injury. It’s clear that we got a significant amount of ”new” winter injury in 2004. What’s not so clear is separating out what happened in 2005 from the delayed consequences of 2004 winter injury. Logically, vines weakened by previous injury are more susceptible to further injury. In the field, however, it’s often really difficult to distinguish ”new” injury from ”old”. We are left with a few pet ideas and stories that may explain some of the patterns. Here are a few observations growers have made:

- Trunks from vines that had produced close to a normal crop last year bit the dust this year. This was observed in particular in vineyards that were not pruned after 2004 to retain enough buds for 2005.
- Vines collapsed early in the growing season. My pet hypothesis about this is that these vines, through injured last year, failed to collapse at that time because last year’s ample rainfall and lack of crop kept them going. They weren’t stressed, so existing injury was masked until hot, dry weather arrived in 2005.
- Buds that were apparently alive in March sometimes failed to push in May.
- Younger vineyards (3 years-old) yielded more than older vineyards.
- Many hybrids performed poorly, perhaps due to trunk injury early in the 2004-05 winter.

These anecdotes, though, don’t begin to tell the entire story.

Crop. Tonnage is still down in some hybrids and vinifera. Other hybrids and native have bounced back. By category:

- Native. Despite the drought stress, many native recovered berry size and were carrying a good cluster count following last year’s reduced crop. Concorde are reported to be in the 6-9 T range; Niagara are praised for a record crop, with Michigan recovering after several disappointing years; Elvies are reported to have yielded heavily. I know of one grower with a 14.5 T crop. Catawbas are expected to be about average.
- Hybrids. Aurora came in at slightly more than 3 T, with yields down for most growers. Cayuga White and Traminette had extensive trunk injury in many blocks, and also went a very disappointing 3 tons or so. Some reported low crops for Baco and Dechaunac, while other growers were closer to normal yields in the 4-6 T range. Other hybrids, such as Seyval Blanc, Marquette, Feicht, CR 7, Vincent and Rougeon were in the normal 5-7 T range. In general, late-maturing varieties yielded better than early-maturing varieties.
- V vinifera. Additional primary had injury this year, along with latent injury dropped yields to the 2 T or less level in most blocks. In addition, vine replacement has reduced mature vine stands in many blocks. The most winter-sensitive varieties are Merlot, Pinot noir. Gewurztraminer posted lowest yields. Chardonnay was closer to normal, with many blocks in the 3-5 T range, and Cabernet Franc are expected to be in the 3-4 T range. Our paragone has yielded several samples from blending throughout the area, with producing vines in the 6 to 12 lb per vine range, or the equivalent of 2.5 to 5 T Vines. Reduced vine count, however, will continue to yield yields per acre until replacement vines start bearing in 2007 or 2008.

Quality. Quality should be excellent across the board. Natives have that combination of high yields and high sugar content, with some Concord coming off at 8-10 T and 17% brix. Virtually all varieties reached optimum (or higher) brix, acidity and pH numbers. Disease was not an issue. Whites achieved physiological maturity and had good flavor development, although the drought raises some concerns about the potential for atypical aging (ATA) development. For late reds, tannin maturity lagged behind flavor maturity somewhat, with seeds lagging in development compared to juice chemistry.

This season was the second warmest (after 1991) in the last 33 years. The bottom line is that there was plenty of heat to open the crop early, and rainfall from Katrina came at the appropriate time (just after veraison) to increase berry size and promote ripening across the board.

Outlook. The fall Finger Lakes crop will be closer to a normal 40,000 T this year. Drought limited vine size, which may limit 2006 crop potential for some varieties. Others, with limited crop (e.g. Cayuga White) should rebound next year, as these vines grew a lot of foliage with little fruit to hold them back. Wood maturity will be excellent, so the potential is there for a rebound among the more winter sensitive varieties. As in ’91, growers should see higher brix fruitfulness in ’06.

Financial outlook. Wineries are still facing inadequate grape supply for many of their products. Following 2004, many had inventory to draw upon and continued on page 4.
GROWING SEASON, continued from page 3

maintain sales. That excess inventory is gone. With grapes still in short supply this year, many may be challenged to service demand for existing products. Some are introducing new products (e.g. Niagara- and hybrid-based wines) to fill the gap. Major processors, looking to fill empty tanks, were chasing after scarce hybrids, and offered significantly higher prices and extended contracts, in some cases. This is good news for growers, and I believe there is room for new plantings of selected hybrids and vinifera (particularly Riesling) to address increased demand for fruit in the small and medium-sized winery sector.

Native varieties, and particularly Concord, face some challenges. With a good crop across all production areas, Concord supply greatly exceeds the needs of juice processors. While Canandaigua and other wine producers held the line on prices this year, National Grape Cooperative growers saw their returns drop sharply this year. It will be difficult for Canandaigua to maintain a premium of $40 per ton (over the $170 cash market price paid by juice processors) in coming years.

Growers will benefit from higher yields and prices this year, although the increased revenue may be offset by higher fuel and fertilizer prices. This should strengthen many growers' financial status following the challenging 2004 season. As we move into 2006 and beyond, it looks like robust demand for high quality hybrids and vinifera will offer growers the best opportunity to sustain income and stay profitable.

Stated grape prices for 2005 increased for all categories of grapes. Increases averaged 4% for native Lodi-style types, to 3% for red and 13% for white hybrids, to 4% and 5% for red and white V. vinifera, respectively. This table is compiled from price lists submitted to the NYS Department of Agriculture and Markets and forwarded to our office. A detailed list of individual prices was published in the September issue of Finger Lakes Vineyard Notes. Please note that these averages do not take into account quantities of grapes purchased at each processor. Large processors buy more, but typically pay a lower price. The "true" average price taking into accounttingham is lower than the average reported in our table.

Canandaigua and Springleuide's (Royal Kedem) price increased by $1.50, but that was offset by a $1.25 increase in Clifstar's price. Catawbas averaged $12 more, with Canandaigua's price increasing by $35 whereas Royal's dropped by $5. Some other processors' prices ranged from $290 to $400, the same as last year. Ellora and Delaware both increased by $20, but the increase was largely due to higher prices posted by smaller wineries that buy fewer tons.

Hybrids. Reds overall increased by a modest 2% at $50 per ton, but major varieties like noir, Dechaunac and Rougeon increased by 8% to 12%, reflecting both the shortage and dramatic increases in prices offered by major processors. Whites increased by 13% for $70 a ton. Aurora led the way, with a 60% increase in both the low and high prices. The 4000/ton high price matches prices received for Aurora during the 70's. Dramatic winter injury to Cayuga white-a Woldorf variety for small wineries-raised average price to $374, and probably drove increases in some other varieties such as Seyval blanc as well. Vidal and Vignoles have smaller acreages, but increasing demand by small wineries.

V. vinifera. Percentage increases in vinifera were more modest, at 4 to 5%, but these increases amounted to around $70 per ton. With the reds, the high end of the price range expanded dramatically—by about $270 a ton. Highest prices listed were $2600 for Merlot and Cabernet Sauvignon. Surprisingly, given the short supply, average Riesling prices only increased by $50, and the top price listed was the same as last year. Of five majors, Chardonnay prices rose the most ($790/ton), reflecting continuing strong demand and a major drop in supply. Chardonnay vineyards were among the hardest hit with vine mortality following the 2004 freeze.

Our thanks to the following wineries and processors for providing us with a copy of their price list:

Antibes: Road Wine Co.
Albatross Estates
Bolly Hill Vineyards
Canandaigua Wine
Chateau Lakeside Renaeu
Clifstar
Dr. Kerstin plank
Fell Bright Winemakers Shoppe
Ford Run Vineyards
Fullerwood Winery and Juice Plant
Glentora Wine Cellars
Hazlitt 1852 Vineyards
Heron Hill Vineyards
Hunt Country Vineyards
King Ferry Winery
Lakeside Vineyards
Lucas Vineyard
Kiffes Wine Cellars
Mogen David Wine Corp.
Rooster Hill Winery
Springleuide Farms / Royal Kedem
Stitichle Vineyards
Sweet Hill Vineyards
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**RED VITISERA**

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**WHITE VITISERA**

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<td><strong>1200</strong></td>
<td><strong>1502</strong></td>
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<td><strong>1350</strong></td>
<td><strong>5%</strong></td>
<td><strong>3%</strong></td>
<td><strong>13%</strong></td>
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Grape and Wine Situation At Harvest 2006 Agricultural Outlook
Jerry White
Department of Agricultural Economics and Management
Cornell University

Grape production. The New York grape harvest was estimated at 160 thousand tons. This represents a near-average crop, 13 percent above last year’s short crop, but just three percent below the average production of the past five years. The crop was affected in mid-season by extremely dry weather until the rain from Hurricane Katrina at the end of August. Growers in the Finger Lakes experienced losses due primarily to extremely cold weather that injured a significant number of vines, although the damage was not as severe as in previous years. Certain wine grape varieties, mainly vinifera and certain hybrids, were affected the most. It is expected that there will be a large Concord crop.

The national grape crop was estimated to be 6.8 million tons, up nine percent from 2004’s very short crop, but about three percent below the five-year average. California, which accounts for about 90 percent of US production, is up about six percent from last year. Washington’s production increased significantly, as did Michigan’s. However, in California, wineries around the state began to notice the grapes in the vineyards were larger than expected. An early start to the growing season co-existed with late spring rains and a cool fall have all contributed to the larger berry size. Therefore the crop is larger than expected, and North Coast growers were having difficulties marketing their non-contracted grapes at any price.

These difficulties are not carrying over to the premium varieties. Consumers are returning to higher priced varietals wines, suggesting that demand for the low end may not be keeping up with the development of vineyards for the premium varietals, both in California and in New York. Wine grape acreage in California continued to decline in 2004. An estimated 100,000 acres of table and wine grape vineyards were removed from the Central Valley in recent years. Much of the attention was focused on the “extreme value” wines like “Two Buck Chuck.” Now it is the high-end of the market that is showing the most growth. This is at least partly due to a faster growing economy and a return to normality after changes in consumer behavior post 9/11.

The big picture - The US and international wine markets. Performance in the US wine market continues to be driven by increased table wine consumption. US consumption reached 661 million gallons in 2004 (Figure 1), an increase of nearly four percent from the previous year. It is projected that the US wine market will be the largest in the world by about 2008, surpassing France, Italy, Spain, and Australia in total consumption. On a per capita basis, however, at just over 9 liters per person, US consumption is dwarfed by that of these three countries. The total number of affluent consumers in the American market and the increasing interest in wine in the culture makes it extremely attractive to foreign producers, and intense import competition can be expected for the foreseeable future.

Growth in imported wines, although modest due to a weaker US dollar in relation to the Euro, continued to increase in 2004, and imports now account for over one-fifth of the US market. Leading countries in growth of imports in the first half of 2005 were New Zealand (+116 percent), and Chile (+28 percent growth). Italy remains the largest exporter into the US market, followed by Australia. French imports are nearly static, still hurt by a strong Euro relative to the US dollar and the American boycott of French products.

US wine exports increased a healthy 29 percent in volume to 119 million gallons in 2004, and should continue to be strong next year. Imports, dominated by California wines, were favorably affected by the weak dollar. Leading markets are the United Kingdom, Canada, and the Netherlands. Exports account for over 15 percent of total California wine shipments. Over 60 percent of California exports go to the European Union. The fight for market share is intense with California and the other major producing countries, such as Italy, Spain, France, Argentina, and Australia, all targeting two growing markets—the US and the United Kingdom.

Retail wine sales in the US reached $21.2 billion in ’04 (Figure 2), with the increased interest in consumers in higher priced wines, sales increased by more than volume. While growth in volume consumed was up 3.9 percent, growth in retail dollars was up 4.3 percent. In the last ten years, retail wine sales have doubled, a remarkable growth rate that averages over seven percent annually!

Continued on page 8

Figure 1. Total Wine Consumption U.S. 1984-2001

Figure 2. Retail Sales of Wine in the U.S. 1991-2004

Source: Wine Institute/Department of Commerce/Parson’s, Fredericksen and Associates

Source: Wine Institute/Department of Commerce/Gensberg, Fredericksen and Associates

NEWSLETTER NO. 10

7
To sum up the situation in the US wine market and the near-term outlook for the rest of 2005 and 2006, supplies of grapes are in balance with overall demand, and prices for grapes are firming up. The growth in imports has slowed due to the weak dollar, but is steady and relentless. Plentiful supplies in the last few years had led to the development of a "low-value" label wine with innovative packaging of premium varieties. Two years ago, wineries and retailers faced their lowest margins in years. In 2005, margins were improved, especially for premium varieties.

One notable caveat: As this article is being written in the aftermath of Hurricane Katrina and Rita, the impacts on oil refineries, and $3.00 plus gasoline, the economy may well suffer in the coming months, dampening demand for wine as well as recreational travel. Costs for producers and importers for petroleum-based products and energy will increase. At the same time, higher gasoline costs may negatively impact the volume of traffic to Finger Lakes wineries causing sales growth to slow down. These wineries are highly dependent upon direct sales to visitors. The index of consumer confidence in the US fell to its lowest level in sixty years, signaling a possible recession. But these are short run concerns; the intermediates as well as the longer-term outlook suggests great opportunities for marketing quality wines.

Finger Lakes grape prices. Reflecting the short supply locally and growing demand, grape prices generally were up for all major categories (Vidal, Hybrid, and V. Vinifera). Canandaigua Wine Company, the major buyer of wine grapes in New York, listed large price increases of $4.50 per ton for Aurora, $3.50 per ton for Catawba, and $2.50 per ton for Niagara, Prices for Concord, Delaware and Elora were unchanged to slightly higher. The overall average price for native varietals and hybrids, when weighted by volume of purchase, will be slightly higher than last year.

Prices offered by Finger Lakes wineries for vinifera grapes were slightly higher than last year for all varieties. Vinifera prices are expected to remain strong in the next two or three years as growers replant to replace vines lost due to winter damage in January 2004, and as the demand for premium Finger Lakes wine continues to grow.

Most wine grape growers’ revenues will be above last year, with both higher production as well as higher prices. (The exception will be growers who derive a substantial portion of revenue from Concord and Niagara grapes sold to juice processors, as juice grape prices were quite low for the past two years.) However, costs will be higher due to substantial replant costs to replace freeze-damaged acreage from the freeze events in 2004 and 2005. It requires over $10,000 in cash costs, to bring an acre of vinifera grapes into full production (White 2005). Furthermore, the low of vines reached in lower crops this year, and will affect crop levels for at least the next two years. Growers’ net incomes will also be negatively affected by higher costs for fuel, fertilizer, and pesticides. Overall, while grape grower’s profit and loss statements will look better on the revenue side than for the last two years, profits may even be lower, it appears that growers will be faced with higher costs for fuel and petroleum based products, at least through 2006, and probably beyond.

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 skill, experienced sales growth of five to ten percent this year - an improvement over last year. Winery visits and purchases per visitor are improving. The environment for price increases is better than it has been, and some wineries have had success in upgrading their product offering by marketing limited production of reserve vinifera wines at higher price points. All of these indicators improved substantially in 2005. 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 events in the last two years. Wineries that had to source vinifera grapes outside the Finger Lakes to maintain their product lines, paid a premium for these grapes. Wineries and growers of wine grapes had to delay replanting this year as the varieties and rootstocks that were available were not available, but replanting should pick up next year. Even if wineries are able to maintain their volume, however, they will experience higher costs and reduced profits for at least the next two years with the necessity to buy in more grapes at higher prices to meet their market demand.

Thoughts for the future: It is 2006 a pivotal year for the Finger Lakes grape and wine industry. There were several notable developments suggesting that 2005 was a pivotal year for Finger Lakes growers and winemakers. These developments made it necessary for growers and wineries to think strategically in order to take advantage of the opportunities now available and to counter the threats that are also present.

It is apparent that freeze damage in 2004, and this year to a lesser extent, is a major concern of most growers and vintners, and that the effects are reflected in the higher prices for wine grapes across the board in 2005. Reduced supply in 2006 is now reflected in tighter room product availability for the area’s wineries, and this surely contributed to the higher price offerings this year to growers. A major strategic question that growers and winemakers must consider is what varieties of grapes should I plant and which sites should be planted, or perhaps not replanted, at least at their current prices, that are susceptible to winter injury in order to take advantage of the future market opportunities? For some growers, the answer will be to replant more of the desirable hybrid varieties that can produce high quality wines. In some 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. Higher valued wines will offer better opportunities to succeed in the competitive packaging game, so this strategy offers a way for wineries to secure vinifera grapes even though their own current sites have limitations. For new varieties to replant on sites that experienced freeze damage, emphasize cold hardy varieties that fit your marketing plan. Remember, it is the long range marketing plan that should drive varietal selections rather than weather!

Table 1, indicates price trends for major grape varieties (Concord and Niagara) are not shown because their average price is the composite of grapes utilized for both juice and wine, and the prices of the varieties that have shown the most...
gain in prices over the last five years are Delaware, Aurore, Baco noir, Cayuga White, de Chaunac, and Seyval Blanc. Vitis vinifera varieties, especially red varieties, were in an over supply situation in 2003 when vinifera prices decreased substantially (Figure 3), but that situation has reversed with the freeze events of the last two years and the growing demand for New York premium wines.

There were several positive developments that generated optimism about future opportunities. First is the favorable ruling by the Supreme Court that will permit New York wineries to ship direct to re-circulating states. This opens a new set of opportunities and challenges for winery managers. Following closely behind was the publication of several favorable articles in the national press in recent weeks (e.g. the Wall Street Journal and the San Francisco Chronicle) that were timely reminders to consumers in other states about the growing reputation of New York wines. Before the direct shipping ruling, retail shelf space was the major barrier to growth for the wineries that had the quality products necessary to succeed in the national market. Direct shipping provides wineries a way to bypass the retail shelf space constraint. These favorable developments offer opportunities to wineries whose management and marketing skills are strong. An important strategic question for growers is the following: which wineries are the most likely to succeed in this new environment where direct shipment to other states are permitted? One of the necessary attributes for ultimate success will be the ability of the wineries’ management and marketing teams to use the internet as a communications and marketing tool to attract target customers. Growers should attempt to become long-term, preferred suppliers of those wineries who are best positioned to succeed in the new marketing environment with interstate shipping and broader national acceptance of the New York wines. Most Finger Lakes wineries have relied heavily upon direct sales at the winery as their primary revenue source. While that will remain the case for many years, over the longer haul more New York wineries will have an opportunity to market their wines out of state, both in retail channels as well as direct shipping to customers, and this offers new growth potential for the New York industry.

A second positive development was the news that New York grape, grape juice and wine products and related industries produced more than $3.3 billion of economic value to New York State in 2004, based on preliminary estimates of a comprehensive study conducted by the Napa Valley-based Mek Research LLC. This study will raise awareness of local, state, and federal officials of the benefits of the New York industry in terms of the substantial ancillary economic activity that is generated by grape growers and wineries, and should help in future efforts to get favorable rulings and legislation that would benefit the state’s industry. There is perhaps little that individual growers can do to take maximum advantage of this opportunity, except to be active in your respective industry organizations to ensure that industry leadership takes a strategic view of the new environment.

The year 1976, when the Farm Winery Act was passed, was a pivotal year for the New York industry, and set in motion the development of the small winery sector in New York State. There is reason for optimism that 2005 can be another such pivotal year for growers and winemakers who are up to the task of competing in this new environment.

**Reference:**


**TABLE 1: GRAPE6: PRICES PAID FOR NEW YORK GROWN GRAPE WINES 2000-2004**

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<td>1,284</td>
<td>1,295</td>
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**SOURCE:** Fresh 916-2-05 NY Agricultural Statistics Service.

*The 2004 price for Elvira was adjusted by the author.*
2005 GROWING SEASON IN PICTURES

Brush piles were a common site as growers replaced a record number of trunks injured in 2004.

Some vineyards yielded heavily: This Riesling vineyard, owned by Paul Fron of Dransford, went 14.5 bbs.

Leaves dropped as the drought intensified.

Rahmed berries in Catawba vineyard near Hector in August.

Severe drought affected area vineyards in July and August. Crews at Wegner Vineyards used a novel method of getting water to newly planted vines.

Many blocks are now a mixture of mature vines and replants.

Drought-stressed Blenheim vineyard near Dresden, West Seneca Lake.

2005 saw increased use of bird netting to protect vines against bird damage.
MARKETING

Impact of Wine Shipping: Two Views from Industry

John Martini and Pete Saltonstall
Anthony Road Wine Company and King Ferry Winery

John Martini and Pete Saltonstall were both heavily involved in the effort to convince the NY State Legislature to pass a law allowing direct shipping, following the landmark Supreme Court decision overturning laws that discriminate among in-state and out-of-state wineries.

John Martini, Anthony Road Wine Company- After years of effort by industry members and with the great support of the New York Farms Bureau, the Legislature passed and the Governor signed legislation that brings New York State into compliance with the recent ruling of the Supreme Court. So, the question to be answered is 'was it worth it?'

We, at Anthony Road, have already experienced an increase in orders from across the nation based solely on the assumption by many customers that are aware of the Supreme Court decision that now we can ship anywhere. Unfortunately that is not always the case and so we have to tell some of them that we cannot ship wine to them yet. Each state will establish their own rules and regulations to bring them into compliance with the Court ruling. I believe that most, if not all, will develop a permit arrangement, as New York has, that calls for fees and the payment of excise and sales tax. All is in flux. Again, 'was it worth it?'

I can say 'yes it was'. While some states will have high financial barriers to hurdle in their state, most will be reasonable and easy to deal with. We will, I hope, be able to ship to the majority of the population in the country. As wine writers, assured that most of their readers will have access to the wines that they rate include New York wines in the reviews, we will see the reputation for our wines grow and the demand follow. Sales will be not only to those who have visited our wineries but also to those who have read a review and decided that they want to try a certain Riesling or Catarauna.

This ability to ship is just one piece of the puzzle in the effort to make New York State a premier grape and wine producer. New York is diversity - from the polyglot that is metropolitan New York City, to the agriculture that exists here. Growers produce 'natives', hybrids and vinifera grapes and consumers have an interest in all of them. In the beginning inter-state sales will be like a small stream, and as time increases it eventually becomes a river. The grapes that are in the ground now may not be the ones needed to supply that river.

The customer has a choice from wines made around the world and our ability to ship means that New York wines will be on tables in California and Texas and other states. The customer is also not stupid forever. They will expect New York wines to have New York character and style, be it Long Island, Hudson Valley, Finger Lakes or Lake Erie.

Pete Saltonstall, King Ferry Winery- As I listened to the oral arguments on direct shipping at the US Supreme Court this past December 7, I knew that we were on our way to getting direct shipping laws passed in New York State. I remember sheeshing a fellow winery owner next to me as Justice Scalia grilled the Michigan Solicitor General on the core presentation of his case and whispering to my friend: 'get it.' My friend just smiled back at me in agreement.

Along with many others in our industry I believe that New York is poised for a tremendous expansion of its wine and grape growing industry. I believe that direct shipping will act in New York just as it did in Oregon, as a powerful catalyst for growth some fifteen years ago. The First Nears from Oregon were, in effect, pulled into the national market by the consumers, instead of by large ad campaigns. For the Finger Lakes, Riesling has proven to be the signature grape variety for many reasons. By the time this article comes to print, I will have shipped many cases of our Riesling to customers out of state. One of these shipments went to a prestigious California wine writer. My hope is that some favorable things might be said about those wines and that it might generate some further consumer interest.

These past two years have not been kind to many of us who grow grapes in upstate New York. I have torn out a 5 acre Chardonnay vineyard because of consistent bird damage on a site that we deemed even to cool for Riesling. But we have decided to use this same site for some hybrid varieties that are more cold hardy. I suspect that many other growers are using similar strategies.

Even with this setback, I am still optimistic about the future of our industry. We will undoubtedly experience some growing pains that will at times be hard to take but we will learn from past experiences and move forward.

The odyssey that a core group of us who worked so hard on direct shipping, has now come to an end. Governor Pataki signed the legislation that passed overwhelmingly in both houses in July and the law took effect August 11 of this year. A friend of mine asked me what I was going to do now with all my free time. The simple answer is to make my business fly.
PROGRANS

Trade Adjustment Assistance
-Not Your Typical Farm Program

Tim Wright - NYS IPM Program
Lake Erie Regional Grape Program

What do Concord Grape, Askan Salmon, Gulf Coast Shrimp and Florida lychee growers and fishermen have in common? The answer is the Trade Act and the Trade Adjustment Assistance (TAA) program that is relatively unknown in the Northeastern United States agricultural community. In fact, prior to 2005 my colleagues and I had no idea that we would ever work with growers participating in the Trade Adjustment Assistance program.

That all changed in April, 2005 when the USDA's Foreign Agricultural Service (FAS) approved a petition filed by Concord juice grape producers in Pennsylvania on behalf of all Concord grape growers in New York, Pennsylvania and Ohio. Under the leadership of the Northeast Center For Risk Management Education, Dr. Gerald White, of the Department of Applied Economics and management at Cornell, brought together members of the Lake Erie and Finger Lakes Regional Grape Programs as well as New York Farm Net. They quickly put together the mandatory training materials needed by growers to qualify for this program.

What we found was a program that concentrated more on training and education than cash payments, although growers who qualified for the program could receive $3.06/ton. Many growers were disappointed with this low payment and wondered aloud how the powers that be felt this could make up the difference in price they received due to foreign competition.

The answer lies in the origin of the program. The TAA program was never intended to provide funding to offset losses due to foreign competition. Looking at a bit of back- ground, the Trade Adjustment Assistance Program was established when the Trade Act of 1974 was amended by the Trade Act of 2002. The trade act of 1974 was created by Congress to provide business owners and their employees' relief from hardships created by foreign import competition. The 1974 legislation was initially designed for non-agricultural businesses and employees (e.g. the steel industry). For this reason, it focused heavily on retraining and education to help affected employees move into different careers and assist businesses to explore alternative products, marketing opportunities, and alternative enterprises. The same holds true for the agricultural TAA, as we'll see.

This is how the program works: The above diagram shows the relatively short amount of time growers had to not only sign up with FAS, but to complete the mandatory training portion of the program. After certification, we in Exxond had 45 days to complete the training materials. By the cut-off date of September 26 (180 days after certification), 570 growers in the Lake Erie region and 1 in the Finger Lakes had completed the mandatory training and qualified for not only the cash payment of $3.06/ton up to $10,000 (on the 2003 crop) but also the following benefits:

• Tuition for up to 104 weeks of full-time classroom education.
• Participation in the intensive training portion of the program.
2005 Juice Grape Economics & 2006 Prospects
Gary Shaffer
Lake Erie Regional Grape Program

The Lake Erie Grape Farm Cost Study (LEGFCs) is a cost-of-production and profitability study in which data from several farms has been collected since 1991. For the last couple of years, a couple of Finger Lakes grape farms have participated. 2004 LEGFCs income per acre of $1953 was close to 1999's record level of $2026. This was primarily due to high income from National Grape members pulling up the average. Since February 2005, incomes for those National Grape members have declined dramatically based on returns from the 2003 and 2004 crops. Many National Grape members will see 2005 grape incomes decline by half. This will likely drop average 2005 LEGFCs income per acre down to levels not seen for 10 years (Figure 1). If these income levels persist, even with better fruit, profitability is likely to fall to a LEGFCs record low level. My current estimates are shown in Figure 2.

Figure 1. Gross income per acre on farms participating in the Lake Erie Grape Farm Cost Survey, 1992-2005.

2005's large national crop of Concord and Niagara (including a bumper crop in Washington State) will mean more than ample inventories in 2006. Bearing adverse weather events, most of the 2006 Concord prices will be flat or down. 2006 Niagara prices are likely to be static. Growers that make money in 2006 will have to show good control and yields in the 7 tons per acre or higher range to get their costs under $200 per ton.

NY juice grape producers are facing a large carryover inventory with both Niagara and Concord. While some grape juice manufacturers have moved away from Concord in their blends, we have not adjusted supply down in the meantime. It encourages grape farm managers to rank their vineyard blocks by profitability. Some managers could drop their lowest yielding juice grape blocks, increase profitability and help to balance supply with the reduced demand. Astute managers should figure how to stay profitable with prices no better than $200 per ton for the next couple of years.

Figure 2. Cash flow, schedule F profit/acre, and total profit/acre from Lake Erie Grape Farm Cost Survey, 1992-2005.

Economic Study Estimates
$3.3 Billion Impact for NY Wine and Grape Industry
Jim Trelawny
NY Wine and Grape Foundation

Regarded as the October 1, 2005 edition of The Wine Press, a weekly e-mail newsletter of the NY Wine and Grape Foundation.

$3.3 BILLION is a hefty chunk of change, and that's a conservative estimate of what the New York grape, grape juice and wine industry and related industries generated in economic benefits to New York's economy in 2004. Niagara Valley-based MKF Research, which specializes in the economics of the wine industry, derived the preliminary estimate based on an extensive survey sent to all New York wineries, combined with information from various federal and state agencies. Funded by a grant from Empire State Development Corporation, the preliminary results are considered conservative, and a final report will be published in mid-October. The comprehensive study measures direct, indirect, and induced economic impact from the grape, grape juice and wine industry as well as related industries which benefit from it such as wholesale, retailing, farm equipment, manufacturing, and transportation. A few of the key findings include 23 thousand jobs and $786 million in wages, $27 million in grape juice sales, and $420 million in wine sales; 4.14 million tourists and $312 million in wine-related tourism expenditures; and $372 million of state and local taxes paid. MKF has conducted similar studies for the California and Washington wine industries, and now we need one for the entire American industry.

NEWSLETTER NO. 10
The paths that lead to one's career are many and varied — for some it's perfectly clear, for others it's a trial and error process of changing interests and majors in college and for still others it comes as a revelation, an encounter with serendipity.

Such was the case with Nova McCune, a senior in Cornell University's Enology and Viticulture programs. "I became interested in viticulture during my last semester at SUNY Morrisville when my professor, tired of my papers about roses, told me to find another plant to do a paper about plant diseases," McCune said. "So I decided to go with one that gets diseases similar to roses, and grapes in the fall. After completing the research paper I decided to read more about grapes, with the result that I read everything I could find and talked to anyone who knew anything about them."

While doing an internship in public horticulture at Longwood Gardens in Kennett Square, PA during the fall of 2003, Nova volunteered at area vineyards to help with the harvest in exchange for any knowledge that she might gain. "Shortly after that, I was given a part-time job as a winemaker's apprentice at Staiger's Vineyard in Coatesville, PA," she said. "I worked through the remainder of the harvest season and most of the winemaking session there through December. John Weigant, the owner and winemaker, asked me if I would like to come and work with him the next year. Nova was selected from a large group of Cornell students as Canandaigua Wine's first intern from Cornell's Viticulture and Enology program," said Tim Moore, Director of East Coast Grower Relations & Vineyard Operations for Canandaigua Wine. "Being the world's largest wine company, we are very excited to be working with Cornell to help develop new leaders in the emerging world-wide wine industry."

Canandaigua Wine wanted to develop a financial study of regional Finger Lakes grape growers. Twenty-five growers on Canandaigua, Keuka and Seneca Lakes were identified and asked to participate in this inaugural study. All growers were Canandaigua Wine growers. "In order to understand the financial status of wine grape growers and to provide the necessary data for future studies, we are collecting information on how the wine grape industry is performing. This information is important to us in determining the impact of changes in the market." said Tim Moore.

The original internship was to run from June 1st through the month of August. Collection of the data took approximately four weeks, and the initial analysis another three. "We realized the need for more analysis, so the project expanded into an independent study for Nova for this fall's semester. A report based on this will be completed by December," Moore said. The data obtained during this time will be used as a basis for an extension publication next year, under the guidance of Jerry White. Results will be presented to growers at the Annual Finger Lakes Grape Growers Convention in March."

"I loved working on this project," McCune said. "My favorite part was getting to know the growers. Meeting them really brought the data alive for me and also helped during the analysis of the data. They are a fantastic people and learned a lot from all of them." McCune added that she worked out that there are as many ways to run a vineyard as there are grape growers and that she knows her way around the Finger Lakes really well now because she had to drive everywhere.

"Tim Moore and the whole Canandaigua team were great people to work with. I really enjoyed getting to know them and working with them on this project," McCune went on to say. "The contributions of Jerry White and Brent Galaty, from designing the form that..."
Kathleen Arnink has been appointed as Enology Lecturer in the Cornell University Enology and Viticulture program in the Food Science Department, where she will be developing courses in Enology for Wine students in Cornell's new undergraduate Enology and Viticulture major.

Kathleen brings many years of research and teaching experience to her new role. Kathleen previously worked as a research associate in wine microbiology with Thomas Henick-Kling's Enology Research and Extension program at Cornell, where her research specialty was microbial ecology of yeasts and bacteria found in wine. She has also developed and taught courses in Evolutionary Biology, Genetics, Microbiology and Enology at Wells College in Aurora, New York.

Through her work at the Station, Kathleen has gained practical winemaking experience, both with small research lots and through collaborative studies with commercial wineries in New York. She has also had extensive exposure to both commercial winemakers in the industry and the unique winemaking issues of our region.

As lecturer, her immediate task will be to develop two key Enology courses for students. 'Wines and Vines' will introduce first year students to enology and viticulture through the study of grape cultivation, fermentation biology, wine composition, sensory perception and the history and culture of wine. 'Winemaking Technology' will be an upper level course designed to provide students with practical experience in winemaking and juice and wine analyses.

Kathleen will also help coordinate and place students in internships at commercial wineries - an integral part of an Enology/Viticulture education at Cornell. Internships provide necessary learning opportunities and practice of techniques as part of the entire Enology and Viticulture program,
Cooperative Research and Demonstration Projects in the Finger Lakes

Timothy S. Martinson

Several research programs at Geneva and Ithaca carry our projects and experiments in area wineries and vineyards. This allows them to complete applied research that would be difficult to do in Experimental Station vineyards. Here are brief descriptions of projects that have taken place over the past year with the assistance of industry cooperators. We agree that the two's effort made by growers and vineyards to support ongoing research projects in the region.

Evaluation of disease control programs. Wayne Willey & Darrell Riedel, Department of Plant Pathology, Cornell University. New and traditional disease control programs were evaluated in replicated small plots in a conventional Chardonnay vineyard. Cooperators: Mark Doychin, Canadasaga Wine Co.; Management of Grape Crown Gall by cultural and biological means, Joel E. Christy, Cheslak, L. Kowal, and Thomas J. Burt. Two mother blocks were established for production of crown gall-free planting material. Of 600, one block has remained clean, while the other - which is near an infected vineyard - has become contaminated by the pathogen. The potential spread of the pathogen to that vineyard is from an adjacent vineyard with disease being observed. Additionally, the rootstocks C309 and 101-14 MG have been generated by tissue culture to make crown gall-free plants. They will be ready for planting by spring of 2006. Cooperator, Dennis Rul. We continue to work with growers to reduce crown gall through a pre-plant root soak treatment with the non-pathogenic strain of A. vitis called E25. This year, over 1,000 vines in two Finger Lakes vineyards were treated. Each fall, the previously treated vines are assessed for the occurrence of crown gall. To date, the majority of our experiments have shown that E25-treated vines have reduced incidence of crown gall. Cooperators: Bill Estabrook and Jeff Morris.

Field plantings of Crown Gall-Free Cabernet Franc, Tom Erdrial, Michigan State University, Tom Burt, NYSAE, and Tim Martinson. Crown gall-free vines and C309 rootstock were produced by tissue culture at Michigan State University. Cooperators: plantings have been established in several Eastern locations, with three treatments: 1) Crown Gall-Free vines; 2) Crown gall-free vines treated root stock with the A. vitis E25 biocontrol strain; 3) Untreated commercially-obtained vines. Over the next three years, Crown Gall-Free Riesling and Chardonnay vines will be produced and planted in cooperators' vineyards on both virgin and replant sites. Crown gall incidence will be monitored for several years following establishment. Cooperators: Mark Wagner, Luminorum Landings John Wagner, Wagner Vineyards.

Optimizing soil and foliar nitrogen application to improve yeast available nitrogen in musts and reduce atypical aging of wine, Lellang Cheng, Horticultural, Cornell, Ithaca, T. Martinson, Finger Lakes Grape Program; and Thomas Henick-Kling.

Food Science and Technology. A field trial was set up on Riesling vines at Nor- bud Farms. The objective is to optimize soil and foliar nitrogen applications to improve wine's nitrogen status, yeast available nitrogen in musts, and fruit quality, thereby improving wine quality and reducing the occurrence or intensity of atypical aging in white wine under NY climatic conditions. Several combinations of soil and foliar nitrogen were applied in 9 treatments. Vine responses to fertilization were evaluated, and experimental wines will be made from each treatment. Juice chemistry will be analyzed for effects on yeast available nitrogen. Cooperator: Norbud Farms, Hector.

Impact and management of Grape Cane blight in Eastern US vineyards. Greg English-Loeb and Steve Holdon, Dept. Entomology, NYSAES and Tim Martin- son and Bill Willey, COE. Grape cane blight (CCB) Amplificates because it leaves the vine vulnerable to other vine blights. One of the hallmarks of the disease is that grape cane blight is negatively impacted by vine age and grapevine species. In the Finger Lakes region for CCB to esti- mate the extent of damage and whether certain locations or varieties are more or less susceptible. Cooperators: Bill Dol- ropp, Talisman Farms and other growers in the area for survey work in the fall.

Riesling terroir project. A survey of flavor diversity in Finger Lakes Rieslings, Tim Martinson, Thomas Henick-Kling, and Todd Fox, Cornell University Viticulture, Enology, and Cooperative Extension programs. The aim of this project is to explore the range of flavors found in Finger Lakes Rieslings. Specifically, this study is focusing at the question of if vineyard location or wine site (s) and climate changes have opened the flavor expression in Riesling. Two clones, 115 and 239) were...
PROJECTS continued from page 26 samples over 5 to 6 weeks at 5 different vineyard sites. Weekly grape samples allow the comparisons of fruit maturation between the two clones and between the 5 different sites. Wines will be made from selected sites in the Finger Lakes to assess whether certain cultivars and certain sites have distinct wine flavor profiles. Funded by the USDA Vocilcute Consortium East. Cooperators: Nobad Farms, Hoerner Vineyards. Hazlitt's 1852 Vineyard, Fall Bright Vineyard, Cayuga Ridge Vineyard, McGregor Vineyard, De Frank's Vinilera Wine Cellars, Miles Vineyard, Skeliakke Point Vineyard, SaumVale Creek Vineyard, Anthony Road Wine Company, Linneman's Landing Wine Cellar.

Compost application for improving soil quality in vineyards. Tim Mattison & Jane Rosenthal and Ellen Harrison, Cornell Waste Management Institute. In the final year of a 3 year project, small scale plots with a low and high rate of compost applied under the trellises were compared to plots with normal nitrogen 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. Cooperator: Bill Dalrymple.

Alternatives to "hilling up" for winter protection in Finger Lakes vineyards. Tim Mattison and Ian Menzion. Several growers have tried mounding up vineyards with wood chips, sawmill waste, and poison for the last several years. Economics of doing so and the insulative value of applied materials have not been quantified. We monitored vineyard temperatures at the graft union, and collected information on amount of material applied, costs of doing so, and labor required, at three sites in the Finger Lakes. This project was funded by the New York Farm Viability Institute, Specialty Horticulture grants program. Cooperators: John Sancho, Hazlitt 1852 Vineyards; Ken Ritter, Butterwood Creek; David Pearson, Swedish Hill Vineyards; and Cornell's Lentis Fruit Farm.

Managing vine vigor and improving red wine grape quality with reflective geotextiles and composted bark mulch. Ian A. Menzion, Dept. of Horticulture; Greg Hostetter, Graduate Research Asisitant, Timothy E. Mattison. We have a project at three Finger Lakes vineyards testing composted hardwood bark mulch, reflective white and black geotextile mulches on Pinot Noir and Cabernet Franc vines. The objectives are to advance winemaking maturity and improve varietal flavor by increasing sunlight to improve the microclimate around clusters, and controlling weed growth and nutrient competition at critical times of the growing season. We are also determining the economic costs and returns from these groundcover systems. The projects are partially funded by the Eastern Viticulture Consortium and NY Wine and Grape Foundation. Cooperators: Richard Fiegel Silver Throd Vineyard/Winery, Dave Wilcox, Skeliakke Point Vineyard/Winery, John Wagner, Wagner Vineyard/Winery.

Determining whether European red milles are serious pests of grape in the Northeast, Ian Nong, Entomology; Alan Lasko and Martin Gallinet, Horticultural Sciences, Geneva There is little data showing what levels of European red mites are required to reduce quality or yield in grapevines, and growers may be applying pesticides too often, or too often enough. We are in the final year of a project to measure the impact of European red mite on V. vinifera grapes. Over the course of two years we found that high levels of mite damage can reduce photosynthesis late in the growing season by approximately 35% compared to undamaged leaves. We observed no effect of mite damage on fruit yield, but mite injury did result in a decrease in "fruits" and higher titratable acidity in 2003. Cooperators: Mark Macnab, Skeling Stone Vineyard; Tom Pohlo and Jim Zimin, Pohlo Wines, Penn Yan.

Testing grape hormone to hasten veraison and ripening. A.N. Lasko and R.M. Pool, Hort, Sciences, Geneva. The natural plant hormone, abscisic acid (ABA), increases just after veraison and is likely a regulator of at least part of this critical process. Earlier research has shown that it can hasten veraison in some cases, but still more work has not been available in agricultural terms. We are testing this product on Cabernet Sauvignon and Riesling to try to begin ripening sooner in the season so they may reach maturity earlier in October in warmer weather. Also we are testing a treatment of Pinot Noir applied right at first sign of veraison to reduce cluster-to-cluster variability and hopefully reduce the amount of unique fruit. Cooperators: Fini Rien Vineyards.

Quantifying and optimizing vine crop load. M. Clancy (graduate student) and A.N. Lasko, Hort, Sciences, Geneva. The optimal ripening of wine grapes requires a crop level in balance with the ability of the grape to support full maturation of the berries before the end of the season. Current experiments focus on how best to define just what is the capacity of different Cabernet Franc and Riesling vines and vineyards to support fruit development with vine capacities and varying crop levels. Ultimately, we will be making wines to reveal 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. Cooperators: C. Verrelli Vineyards.

High resolution monitoring of terpenes in Pinot noir grapes. A.N. Lasko and R.C. See, Hort, Sciences and Plant Pathology, Geneva. Since vineyards sites in the Finger Lakes are on varying topographies, we know that there are variations in temperature regimes during a year. These may be crucial in the winter, but may also have large effects on vine growth or crop ripening. The recent availability of inexpensive temperature loggers has made it possible to have dozens of temperature measurements at hourly intervals within vineyard blocks to document the actual differences in temperatures across a vineyard, down a slope, in swales versus rises, etc. We will deploy over 100 of such sensors in locations in the Finger Lakes this fall. Cooperators: Fox Run Vineyards, C. Verrelli Vineyards and others to come.

Evaluation of Pinot Noir. Bob Pold and Thomas Hundt-King, Cornell University Vocilcute and Enology programs. As part of the ongoing study of wine grape varieties and clones at the Finger Vineyard to compare the flavor profile of the Pinot Noir clones 459, 667, and 115. The previous large Pinot Noir clone trial at the NYSAES Geneva provided much information about almost 30 different clones to NY growers and winemakers. One of the top clones in this previous study was clone 115. This year we are able to compare clone 115 to two newer selections from France. We hope to continue and expand the clone evaluation of Pinot Noir to be better able to describe the quality potential of this variety for NYS. Funded by the USDA Vocilcute Consortium East. Cooperators: Hoerner Vineyards.

Evaluation of Cabernet Franc, Dragana Dimitrijevic and Thomas Hundt-King, Cornell University Enology program. This project is evaluating the impact different Continued on page 19
May 19, Spring Pest Management Update Our annual Pest Management meeting was moved this year to Stone Hill Winery on Rokita Road. It featured updates from the DEC, insect, disease and weed management updates, a grape technology update and industry updates. The meeting closed with a barbecue and were taken by the Honen staff. Special thanks to John Ingles for hosting the event, to Tim Moore for providing the chocolate and vineyard for the poster demonstrations, and for all those who sponsored the barbecue. Participants: Ed Habich, NYDEC, Greg Engle, Vineyardologist, Wayne Vayvoda (Mathews), Rick Davis (Richards), Roger Weaver, Northfork Vineryards, Charlie Smith (LAP Northfork), Chris Diarm (Hilton), Dave Prazan (Joshua, Honen Hill Stafford, Tim Moore (Canaignia Winery).

June 15 and 17, Mock inspection for WPS Standards Compliance, two "mock inspections" training programs with winegrowers provided education on what is required for growers to be in compliance with the WPS Standards. Participants: Ed Habich and DEC colleagues: Susan Chok, Lance Falliglar Vineyards, and Matt Doyle, Canaignia Valleys vineyard.

Coffee Pot Meetings. Seven informal meetings were held in vineyards throughout the Finger Lakes, generally from 10:30 to 11:30 on Wednesday. They were designed to address seasonal topics on production topics in different areas. Here are the dates, hosts, and topics:

- May 11, Wagner Winery, Edit John Wagner discussed design of his Sahra Tocali vineyard, which is designed to be completely remove old vines and replace them with new vines, without moving vines. Participants: John Wagner, Wagner Winery.
- June 6, Caneigia Shing, Pulney Winery, Tim Veale, Statewide IPM specialist for grape, discussed pest management issues. At the Pulney Winery, Caneigia has done a lot of work renewal and conversion from CDC to a single variety. Matt Doyle commented on the extensive new projects underway at the Pulney Winery, Participants: Matt Doyle, Caneigia Winery, Tim Veale, NY State IPM project.
- June 22, Arbor Hill Growers and Howell Sonoma Farms, North fork, and vineyardists of Canaigia Lakes production of hybrid varieties, including the number of and Muscat variety and their potential was discussed. We visited plantings at John Bingham's farm and Ronald Strang vineyards (Paul and Pauls) Bingham, Participants: Tom and John Bingham.
- July 20, Coffee Pot Meeting, Lucas Vineyards, Extent-free insulation techniques, disease monitoring, and monitoring vines for vegetables discussed. Participants: Jeff Bouch, Lucas Vineyards, Chris Becker, BAAR Scientific Vineyard consultant.
- July 27, Haskin Fullscom Vineyard, Rock Stream, Hinter burrow caves from about 2 acres of V. vinifera grape. We discussed the costs and benefits of burrowing caves, and survival in preserving frost protection. Participants: Haskin and Susie Fullerom.
- August 18, Hunt Country Vineyards, Branchport Hunt Country Vineyards received a VARE (Sustainable Agricultural Research & Education) grant to investigate the use of organic cover crops to reduce the use of under the row herbicides. Our program, along with the Lake Erie regional grape program and the Long Island grape program has received a grant to develop a sustainable viticulture grower's assessment workbook for growing conditions and varieties. Both projects were discussed. Participants: Andy Haag, Hunt County Vineyards.
- September 1, Philip Davis Vineyard, Mead Use of preplant cover crops to control of the Kanep tree. The harvest season has provided some insights into our root systems that are close to vineyards, Jim Ohlson, Schuyler County Cooperative Extension, and Dr. Paul Utz, wildlife disease control specialist with Cornell University, discussed the results of the research and how to manage rodent and corn-based diseases for maximum effectiveness. Participants: Jim Ohlson, CCE at Schoharie Co., and Bill Dalmynette, Dalmynette Vineyards.

Lake Erie Growers Visit The Finger Lakes Hank Walters-Peretsen, Lake Erie Grape Program.

On Friday, August 12th, 16 Lake Erie and Niagara region grape growers visited with several Finger Lakes growers and winemakers to discuss their experiences with wine and wine grape production. The group started at Roundtable Cellars, where Jim Hatzis provided an educational and valuable presentation on his operations. The tour continued at St. Hubertus Vineyards, and then onto Canaigia Lakes Vineyards. The tour ended at Old Rabbit Vineyard, where Steve Bouchard discussed what expectations grape growers and winemakers should have for the upcoming season.

Lake Erie Growers Visit The Finger Lakes
Hank Walters-Peretsen, Lake Erie Grape Program.
The Finger Lakes Grape Program receives many inquiries about starting up new wineries and vineyards each year. It’s not often that someone new comes into the area wanting to sell table grapes to ethnic markets in New York. So we note this as a welcome development.

Ms. Sunphak Choep is the new owner of Lance Fulleragar Vineyards, and is now marketing fresh Niagara and Concord grapes to several markets in the New York City area under the Lance Fulleragar Vineyard label. The farm web site www.fullagarvinyards.com cites the heritage of four generations of Fullagar as a tradition they hope to continue and build upon. To date, he has packed and shipped 30 tons of grapes, packed in one-and two-lb clamshell plastic containers. Labels are printed in both English and Korean. He sees the potential for expanding to about 150 tons next year, and eventually hopes to market about 20% of the farm’s production as table grapes from the Finger Lakes. Lance Fulleragar Vineyards also sells a wide variety of wine grapes to several Finger Lakes wineries.

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fermentation temperatures, cold maceration, and tannin addition on the final wine flavor profile. Funded by US Federal Formula Funds and the New York State Agricultural Experiment Station, Geneva. Cooperators: Sheldrake Point Vineyards.

Yeasts and bacteria starter culture evaluation in Chardonnay and in Merlot, Thomas Henick-Kling, Kathryn Mauk, and Daganio Dimitrijevic, Ben Gavitt, team Preston Wiley, Enology Program. This study examines the effect of selected yeast and bacteria starter cultures on wine flavor. Different yeasts can increase the expression of fruit, floral, and spicy wine aromas and increase its mouthfeel. Previous work we carried out showed that some yeast and bacteria starter cultures are very favorable, others are not. In this study we try to better describe the impact of selected yeast on the wine flavor profile and the interaction of yeast and bacteria wine starter cultures. Funded by Lafinemond Inc., and the New York Wine & Grape Foundation. Cooperator: Ponder Vineyards.

Winemaking techniques for Lemberger, Thomas Henick-Kling and Laura Pesek, Wiley, Cornell University Enology Program. This experiment is set up to evaluate the effect of pre-fermentation cold maceration, two different fermentation temperature profiles, two different yeast strains, and extended maceration after completed alcoholic fermentation on the flavor profile of Lemberger. Lemberger is rapidly becoming a major, premium wine grape cultivar for NV. It is important to understand what flavors and tannins we can expect from Lemberger in NV and how we can direct the flavors during winemaking. This small project is one stop towards this goal. Funded by US Federal Formula Funds and the New York State Agricultural Experiment Station, Geneva. Cooperator: Anthony Road Vineyards.

Evaluation of new red wine hybrids 73.0136.17 and 70.0809.10, Brian Welch and Thomas Henick-Kling, Cornell Grape Breeding and Enology programs. In coopera- tion with Swedish Hill Vineyards we are exploring the wine flavor envelope of these two new, promising red wine cultivars from the Cornell Grapes Breeding Program. We are evaluating various fermentation conditions and harvest ma- terial to better understand what flavors can be expressed by these new grape varieties. Cooperator: Swedish Hill.

Reverse osmosis for grape must, Dragana Dimitrijevic and Thomas Henick-Kling, Cornell University Enology Program. This evaluation of the reverse osmosis system should tell us how much we can affect the final wine quality by removing excess water from the grape must. During many harvests we must deal with rains which can significantly dilute the flavors in our grapes. Reverse osmosis technology offers the possibility to selectively remove water from the grape must before fermentation. Collaborator: Maria Clara Vineyard.
UPCOMING EVENTS

January 24-26, 2006
Unified Wine and Grape Symposium.
Sacramento Convention Center.
Call 800-350-7496 or www.unluckyposium.org

February 6-10, 2006
Sixth International Cool Climate Viticulture and Oenology Symposium.
Christchurch, New Zealand.
Website: http://www.iccs2006.org.nz/

March 3-4, 2006
55th Annual Finger Lakes Grape Growers Convention and Trade Show.
Waterloo Holiday Inn, Waterloo, NY. Details in upcoming Vineyard Notes. 315-536-5134 or www.fruit.cornell.edu

March 12-15, 2006
Wineries Unlimited.

March 30*, 2006
Lake Erie
Grape Growers Convention.
Fredonia State University, Fredonia, NY. Call Linda Aures at 716-672-5296 or http://lindaaa.universityatbuffalo.edu/public_html/lonny.htm

April 5-7, 2006
35th New York Wine Industry Workshop.
Lakefront Ramada Inn, Geneva, NY. The program includes seminars on wine marketing hosted by the NY Wine & Grape Foundation and the annual Unity Dinner of the NYWGF. Also included will be a trade show and the technical seminar focus will be on wine bottling. Detailed information about the WW will be posted at: http://www.nysaes.cornell.edu/st/faculty/henick/ww/index.html

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