



# Northern Grapes News

November 30, 2012

Vol 1, Issue 4

## Viticulture 2013 and the Northern Grapes Symposium

Chrislyn Particka and Hans Walter-Peterson, Cornell University

Make plans now to attend the *Viticulture 2013* conference and *Northern Grapes Symposium*, from February 6th to 8th at the Rochester, NY Riverside Convention Center. *Viticulture 2013* is a statewide conference co-organized by the New York Wine and Grape Foundation and Cornell Cooperative Extension. It is held every three years, combining the regional Finger Lakes Grape Growers' convention, the Lake Erie Regional Grape Program conference, and the New York Wine Industry Workshop. This year, the *Viticulture 2013* conference will also host the second annual *Northern Grapes Symposium* on February 6th.

The *Northern Grapes Symposium* will feature preliminary results from the first year of the project and practical management information for cold hardy vineyard and wine producers in three sessions, each focused on a different topic area.

The **Consumers and Marketing** session will include Bill Gartner (University of Minnesota), who will review results of the baseline survey that was distributed this spring; Miguel Gomez (Cornell University), who will discuss challenges and opportunities in emerging wine regions; and Dan McCole (Michigan State University), who will talk about collaboration among wineries and tourism.

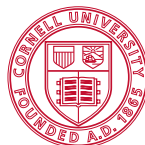
In the **Enology** session, Katie Cook (University of Minnesota) will discuss early results from the yeast strain trials, Anna Katharine Mansfield (Cornell University) will review deacidification strategies, and Murli Dharmadhikari (Iowa State University) will talk about use of ecological tannins in making wine with cold hardy grapes.

The **Viticulture** session will include Tim Martinson (Cornell University), who will discuss the influence differing climates in the participating states had on maturity and fruit composition of cold hardy cultivars; Paul Domoto (Iowa State University), who will review year one results of other viticultural studies; Carl Rosen (University of Minnesota), who will discuss first year results from the nutrition study; and Patty McManus (University of Wisconsin), who will cover disease management and varietal sensitivity to copper and sulfur fungicides.

The *Viticulture 2013* symposium and trade show offers a wide mix of speakers and wide-ranging topics in viticulture, enology, marketing, finance, legal/regulatory, and others, and attracts over 800 participants from NY and surrounding states and Canada. One of the keynote speakers this year will be Dr. Stefano Poni, a viticulturist from the Università Cattolica del Sacro Cuore in Piacenza, Italy. Dr. Poni is one of the world's leading viticulture researchers, whose work has focused on applied vine physiology topics including crop load management, water use, mechanization, and adapting vineyard practices to changes in climatic conditions. The full *Viticulture 2013* program is available at <http://vit2013.com/Program.html>

You can register for *Viticulture 2013* and the *Northern Grapes Symposium* on the [Viticulture 2013 website](http://vit2013.com). Early-bird registration is available through January 15th. Cost of the program ranges from \$135 for Wednesday-only registration to \$295 for the full conference. Please note that many meals are included with your conference registration, including lunch Wednesday, which will feature wines made from cold hardy grape cultivars and the Unity Banquet that evening.

A discounted room rate (\$109/night) is offered for conference participants at the Rochester Hyatt Regency, which is connected via skyway to the convention center. Rooms can be booked at <https://resweb.passkey.com/go/2013viticulture>. For those traveling to Rochester by air, the Hyatt offers a complimentary airport shuttle; arrange for pickup by calling 585-546-1234.



Cornell University

# Funding for the Northern Grapes Project: Beyond Year Two

Tim Martinson, Cornell University



As we close out the first year of the *Northern Grapes Project* and enter the second year, our project team is proud of all the work we have started in the project's four focus areas: Varietal adaptation to different climates (the vine), viticultural practices (the vineyard), wine-making practices (the winery), and consumer/marketing research (the tasting room).

To quote our project proposal, the vision guiding the project is “...To develop grape production, winemaking, and marketing practices suited to the unique characteristics of *V. riparia*-based [Northern Grape] cultivars marketed through retail tasting rooms and their niche in the US wine market.” Our overriding goal is to support development and growth of your vineyard and winery businesses through these activities.

We designed this integrated Coordinated Agricultural Project—or CAP—as a five-year project. We were initially awarded two years of funding and will be submitting a renewal grant to the USDA Specialty Crops Research Initiative (SCRI) to fund the remaining three years of the project. The SCRI program is on hold, awaiting congressional action on the farm bill, which failed to pass both houses of congress before the election.

**Progress to date:** Funding from the SCRI has allowed us to establish a coordinated research and outreach effort, spanning 12 states and involving 30 research and extension specialists, in partnership with 19 industry associations. Here's what we started in 2013:

- 49 experiments involving field studies at 12 universities and with 16 commercial vineyard operations. Topics include: Variety trials, training systems evaluations, mineral nutrition, varietal disease and fungicide sensitivity, and canopy management practices.
- 209 experimental fermentation lots were made, with wine-making trials focused on acid adjustment, tannin additions, yeast strain optimization, and YAN content and management.
- 600 responses were received for our project baseline and economic impact survey. Results, to be released shortly, show the economic impact of cold climate cultivars across

the upper Midwest and Northeast, and also provide a snapshot of current viticulture and winemaking practices.

- A survey of state regulations influencing grape and wine production was compiled.
- Seven cooperating wineries in Iowa and New York are administering customer satisfaction surveys to their tasting room customers (March-November). 350 surveys were returned within the first three months.
- Michigan State researchers are constructing consumer profiles and tourism characteristics of visitors to tasting rooms. Over 900 completed surveys were collected from 15 wineries.

**Outreach:** From the start, the *Northern Grapes Project* has provided educational programs on grape production, wine-making, and business-related topics, through a wide variety of venues, reaching an estimated 1,850 persons.

- 200 attendees at the first *Northern Grapes Symposium*, held at MGGA's Cold Climate Conference in St. Paul, MN
- Six [Northern Grapes Webinars](#) provided educational programs delivered to participants in 37 US States and Canada, with attendance ranging from 48 to 135 per program.
- 25 workshops and field days in most of our 12 participating states were attended by over 1050 people. These featured diverse topics, including use and management of oak barrels, a beginners workshop, and several pruning workshops.
- Three issues of [Northern Grapes News](#) were published, with 13 articles and profiles of team members.
- The [Northern Grapes website](#) was launched in February, and the eXtension grape community of practice, also known as [eViticulture.org](#), featured content from the *Northern Grapes Program*
- 19 state and regional industry organizations are partners with the *Northern Grapes Project*.

For more details, I invite you to review our 11 page, non-technical *Northern Grapes Project* [Year 1 Progress Report](#) posted on our website.

**Renewal.** We are funded through September 2013, but to realize the project's potential we will need to secure additional funding for the remaining three years of the project. Two years is enough to get things started, but field research in vineyards requires, at a minimum, three field seasons, and winemaking projects require an additional year for each vintage to produce finished research wines.

For this reason, we will be asking the USDA to renew our project funding for the remaining three years, at a budget of approximately \$3.6 M. While this sounds like a lot of money, keep in mind that it supports annual budgets ranging from \$2,500 to about \$200,000 annually at 12 universities, with most ranging between \$15,000 to \$40,000 per year. And each dollar of federal support is matched by a dollar of non-federal funding.

**Uncertainty.** The SCRI program's continuation depends upon action by congress to pass the 2012 Farm Bill (See following article by Jean-Mari Peltier for more information). We don't yet know what final form this will take, or when it

will happen. But when it does, we'll be submitting a proposal, which will compete with other new proposals for funding by the USDA.

In my opinion, we were successful in getting the *Northern Grapes Project* funded because we had great support from the industry across several states for the goals of the project. I want to thank all the industry organizations – and particularly the cooperating vineyards and wineries that are hosting our field trials and participating in surveys. We appreciate it, and will again be asking for your support and partnership as we apply for continued funding sometime in 2013.

## Viewpoints: Crop research will wither if farm bill fails to pass

Jean-Mari Peltier, President, National Grape and Wine Initiative



Obscured by the immense shadow cast by the Civil War is one of President Abraham Lincoln's most significant and enduring legacies – the creation of the land grant university system now celebrating its 150th anniversary.

In 1862, the Morrill Land-Grant College Act committed 17.4 million acres of land to all states for the purpose of establishing universities aimed at making higher education

accessible to the masses while simultaneously boosting the nation's farm economy with practical research for improving the ability of farmers to feed their countrymen.

Since that time, a world-renowned network of scientists from within the U.S. Department of Agriculture, universities and cooperative extension offices across the nation have increased our country's abundance of food, fiber and fuel. In the modern era, the fruits of this ongoing commitment to research have been sustained through a series of farm bills approved every five years.

But the clock is now ticking on the 2008 farm bill, set to expire unless Congress acts before adjourning this year. Not only must Congress act, it must pass the new 2012 farm bill rather than merely opt to extend the 2008 measure as a stopgap approach. Otherwise, there will be no mandatory research funding for specialty crops, leaving fruit, vegetable, nursery and nut farmers out in the cold.

This may be a challenge because the 2012 farm bill currently before Congress contains numerous elements, including such politically-charged provisions as commodity support, food stamps and conservation programs. But congressional failure to act would be a travesty for specialty crop agriculture, which has reaped significant benefits from a relatively small research program first signed into law five years ago.

Specialty crops include wine and table grapes, strawberries, almonds, walnuts, pistachios, avocados, apples, carrots, peaches, raisins, nectarines, garlic, mushrooms, lettuce and dozens of other crops that are grown by farmers who feed the nation and world.

Therein lies the importance of the Specialty Crop Research Initiative, or SCRI, which was included in the 2008 farm bill to expand and strengthen research for more than 250 specialty crops long overlooked despite their collective value. Specialty crops now comprise more than half of the total value of U.S. agricultural production. In a short time, SCRI has resulted in game-changing innovations not just in California, where specialty crops dominate, but also in such diverse states as New York, Michigan, Virginia, Florida, Washington, Ohio, Kansas and Oklahoma.

After all, our country's pre-eminence in specialty crops did not occur in a vacuum. Since 1862, Congress has funded farm research, which has been responsible for real-world breakthroughs that have made agriculture a pillar of the economy and the envy of the world.

Looking at the grape industry, research impacts have been astonishing. Wine grapes and wine production have become world-renowned. Grapes comprise the nation's largest of all specialty crops, generating \$162 billion in annual revenue,

\$33 billion in wages and \$17 billion in state and local taxes. Our industry's experience reflects a University of California economic study that pegged an astounding 32-to-1 return on investment for every dollar spent on agriculture research.

Besides economic benefits, agricultural research is key to solving a host of major societal and environmental problems. It prevents crippling plant diseases that can wipe out crops. An example that hits close to home for the American wine and grape industry is the epidemic of trunk diseases, which decimate crops to the tune of \$200 million in losses annually. Our industry is mapping the genome of vines in a research effort essential to combating these vineyard scourges. Another project funded by this program is developing practices to produce high quality grapes under drought conditions.

Reprinted with permission  
© The Sacramento Bee, 2012  
Published on Sunday, September 16, 2012

Research also protects the environment by finding ways to reduce water and pesticide use. Research helps develop sustainable farming practices. It ensures national food independence and an ample supply of nutritious fruits and vegetables for all Americans. For all these reasons congressional delegations from specialty crop districts across the United States should rally to ensure research funding for specialty crops is included in any vote.

It is not hyperbole to assert that the land grant act of 1862 has served as a common thread unifying our nation as we've evolved from an agrarian to an industrial and now to an information society. With a tiny percentage of farmers now feeding more than 300 million Americans and many more around the world, a bipartisan approach to funding meaningful agricultural research is more important now than ever before.

If President Lincoln were alive today, he would certainly agree.

## Harvest Wrap Up: Notes from Across the “Northern Grapes” States

### Connecticut, Bill Nail

Following a fairly mild winter with relatively little snowfall, the weather warmed earlier than normal beginning in late March. Bud burst was two and a half weeks earlier than normal. The riparia-based cultivars were especially vulnerable to late frost. Some vineyards suffered significant crop loss as a result, while others were unaffected. The growing season was warm and mostly dry. Harvest of St. Croix began September 1 in some vineyards. Periodic rain during the ripening period was generally not sufficient to cause significant harvest rots. The spotted wing drosophila caused minor damage in some vineyards, but damage was far less than in 2011.

*Severe frost damage on Marquette in Iowa. The unusually warm temperatures in March resulted in reduced yields in many areas.*



photo: Mike White, Iowa State University

### Illinois, William H. Shoemaker

The 2012 season for Illinois' 1200 acres of wine grapes was very challenging for growers due to intense heat and drought. In the north, temperatures often exceeded 100°F, leading to very stressful conditions through the season. Grape producers in the south faced even greater stress, with historic drought and heat. Growers with experience, mature vines and irrigation struggled to maintain vineyard vigor and targeted production levels. As a result, productivity was generally reduced, with total yields about half of normal for the state. Some signs of ripe rot disease were seen in riparia-based varieties at maturity. However, winemakers generally expressed pleasure with fruit quality. Good rains after harvest left growers feeling their vineyards are going into the dormant phase in better-than-expected condition.

### Iowa, Mike White

The 2012 Iowa winegrape season started with an unusually warm March and then a frosty April. On the mornings of April 10 and 11, temperatures ranged from 16°F to 32°F across the state. The southern half of the state (south of I-80) received the greatest amount of damage because this was where the vines had broken bud and leafed out the earliest. Temperatures of 18°F in a few vineyards were low enough to split trunks and kill the vines to ground. The early bud breaking cultivars received the worst damage. Proclamations

of reduced yields were then offset by rainfall that failed to fall starting in mid-May over much of Iowa. The resulting lack of disease pressure and high temperatures over the remaining summer resulted in a disease-free, larger-than-expected crop that came on two to three weeks early across Iowa. Overall, Iowa growers harvested an excellent quality crop of only slightly than lower average expected yields.

#### **Massachusetts, Sonia Schloemann**

Wine grape growers in Massachusetts had a much improved growing season over that of 2011, which was dominated by rain and cloudy weather. By comparison, 2012 was warmer and dryer. An early season warm spell in March accelerated the growing season by almost two weeks, but that did not result in significant frost/freezing injury to early season growth, as many had feared. More problems with powdery mildew were reported in 2012 than in recent years and growers will have to be prepared to deal with higher levels of overwintering inoculum in 2013 as a result. Spotted wing drosophila was a great concern throughout the region, but preliminary findings suggest that this new fruit fly pest is not a serious threat to most wine grape varieties except those thin skinned varieties that are also prone to cracking. Fruit ripening measures (brix, TA and pH), for most varieties were much better than in 2011, reflecting the better growing conditions experienced in 2012.

#### **Michigan, Paolo Sabbatini**

Vine growth began very early this year in Michigan due to the exceptionally warm weather at the end of March. Juice grape cultivars and super-hardy cultivars reached bud break stage at the end of March, while vinifera cultivars and French hybrids were still at the beginning of bud swelling. Unfortunately, temperatures dropped to 20° F on April 7th, causing significant damage to juice grape vineyards (90% crop reduction). Another severe freeze on April 12th caused additional damage to super-hardy cultivars across the state, and most lost primary shoots. Vine growth on super-hardy cultivars depended mostly on secondary buds and yield was reduced across different cultivars and sites from 10 to 50%. Summer heat units in Michigan were 20% higher than the ten year average and they were coupled with a summer drought that (1) reduced vine size and (2) reduced vine vigor, (3) reduced bunch rot and (4) increased hang-time; all of these conditions were pivotal for high fruit quality at harvest. In particular, the drought after bud break was very important for the final quality of the fruit because reduced berry size increased the skin to pulp ratio, resulting in more intense grape flavor.

#### **Minnesota, Katie Cook**

A combination of a long growing season with a hot summer and dry August meant that the vines were moving along pretty quickly in Minnesota. In early August, many growers were expecting to harvest Marquette before Labor Day!

However, temperatures cooled down significantly in mid-August until the first week of September to slow down grape ripening in a timely fashion. Nonetheless, we still saw most vineyards harvesting grapes about two weeks earlier than average. Overall, fruit quality was good, although generally sugar levels were much higher than average. The cool-down in August, while helping to slow down sugar accumulation, also worked to keep acid levels relatively high. Wineries will have to work to achieve balanced wines with high potential alcohol coupled with high total acidity.



photo: Tom Zumpfe, Dove Landing Vineyard

*2,4-D damage on Edelweiss, taken on June 1 at Dove Landing Vineyard in Lincoln, NE. Several vineyards reported herbicide damage this year, prompting development of a Pesticide Drift Seminar, which took place on November 3, and was sponsored by the Univ. of Nebraska Viticulture Program, the Nebraska Winery and Grape Growers Association, and the Northern Grapes Project.*

#### **Nebraska, Paul Read**

In Nebraska, the drought and heat caused reduced yields across the state, with some exceptions. Quality was mostly better than might be expected. Although the vines are not irrigated, the yields at the UNVP Nebraska City site were up considerably over the previous two years, with some cultivars averaging over 60 pounds per plant. An analysis of Growing Degree Days (GDD) has been initiated in response to the obviously aberrant growing season in 2012. Of particular note is the difference comparing the entire season GDD in 2012 (3866 GDD at Nebraska City, 3081 GDD at Lexington and 3566 at Brule) versus 2008 (3243, 2966 and 2903, respectively). Some vineyards suffered from extreme herbicide drift damage, hail damage or insects. The major plantings of the NE-1020 and Northern Grapes Projects are located on a commercial vineyard that suffered extreme damage from herbicide drift. As a result, crop yield was reduced to a great extent across the plantings. However, there were significant differences in degree of injury among cultivars and numbered selections. Ratings were taken and a report on the relative damage was presented at the Pesticide Drift Seminar on November 3, 2012 and will be reported at later meetings.

### **New York, Kevin Iungerman and Chrislyn Particka**

Growers in northern New York, like many other areas of the country, were heavily influenced by the extremely warm period in the early spring, followed by a return to “normal” temperatures. Some cultivars, such as La Crescent, experienced severe frost damage and very light crops, while others, such as Frontenac, had little to no damage. Overall, growing conditions were exceptional in 2012. Maturity ran 10-14 days ahead of recent years. Brix readings were also elevated over recent time lines, and in cases, acids were lower. Few serious pest issues were noted. Though spotted wing drosophila was widely reported (and documented) in raspberries and other soft fruits, and stories from elsewhere suggested grape susceptibility, none were observed in regional vineyards.



*Phil Randazzo, owner of Coyote Moon Vineyards, harvests grapes with his grandchildren Tamblin and Lexie. Coyote Moon is located in Clayton, NY.*

photo: Kristina Randazzo-Ives,  
Coyote Moon Vineyards

### **North Dakota, Harlene Hatterman-Valenti**

For grape growers in North Dakota, 2012 was considered a year of extremes depending upon where one lived. On the eastern to almost central part of the state, vines with good vigor generally survived the winter months with little dieback. Many growers in the western part of the state were not as fortunate as many vines had split trunks and complete dieback to the ground. For some, especially around the Bismarck/Mandan area, the extremely dry late summer and fall of 2011 along with the open winter really caused major problems. To make matters worse, many of these vineyards also received a frost/freeze on May 30. This one-two punch has really set back growers and many are convinced that there isn't a good winegrape cultivar hardy enough for their area. A vineyard near the Dickenson area using data from the NDAWN station in nearby Hazen, ND reported 198 GDUs by April 1 (196 more than normal), 355 GDUs by May 1 (203 more than normal), and 632 by June 1 (157 more than normal). Temperature swings in the spring were so extreme that a day with a low of 9° F was followed by a high of 90° F. Even with all this erratic weather, the vineyard reported good production on 'Valiant', 'Frontenac', 'Frontenac Gris' and 'LaCrescent'. In contrast, 50% of the 'Marquette' died to the ground, while 80% of the 5 yr old 'Sabrevois' had split trunks and died to the ground.

### **South Dakota, Rhoda Burrows**

South Dakota vineyards exhibited effects of the drought that began last fall, resulting in winter damage despite an otherwise very mild winter. Some cultivars suffered primary bud damage, either due to winter stress or late frosts. Although Marquette and St. Croix had good winterhardiness, they lost bud hardiness earlier than Frontenac and Brianna in the spring (mid-March). At least two vineyards lost the majority of their crop to hailstorms. Extreme heat and drought starting in June led to vine stress in vineyards either lacking sufficient irrigation capability, and berries ripened in some cases a month earlier than normal. On the positive side, with the very dry summer, disease pressure was relatively low in most of our vineyards. Bird predation, however, was extreme, with some vineyards reporting 50% loss even with netting. Brix were generally high, most likely due to limited berry size.

### **Vermont, Lorraine Berkett, Terence Bradshaw, and Sarah Kingsley-Richards**

Vermont wine grape growers indicated that 2012 was a very good year overall. Yield has generally been reported as good, with no damage reported on vines that experienced early budbreak during an unusually warm March followed by frosts on April 28-30. June thunderstorms with associated wind and hail also caused some localized damage to developing shoots in certain vineyards. Pests of concern in 2012 included what appeared to be a rising incidence of anthracnose, late-season powdery and downy mildews, and spotted wing drosophila, which was positively identified in the University of Vermont vineyard and present throughout the season. Brown marmorated stink bug was not a concern for Vermont growers, but native brown and green stink bugs were reported as present in many vineyards. Fruit quality and ripening parameters have been reported as excellent this season, and the industry overall feels that this may be the best vintage in its relatively short history.



photo: SarahKingsley-Richards, University of Vermont  
*A spotted wing drosophila trap hangs in a grape canopy at the University of Vermont research vineyard. SWD was found in wine grapes in some states, but it is not yet clear how much of a pest it will be.*

## Wisconsin, Rebecca Harbut

Wisconsin, like many other regions in the Midwest, had an unusual year with record breaking spring temperatures and drought throughout most of the season. High temperatures in March led to early bud break and the low temperatures that followed in April led to bud damage in several vineyards. Overall, yields were below average but quality was improved, which can be attributed to a reduced crop load and greater heat unit accumulation. Harvest of most cold-climate grape varieties occurred approximately two

weeks ahead of schedule compared to previous seasons. Pest pressure was also influenced by the unusual weather. Disease pressure was lower than normal as the drought reduced fungal infection periods. The extended period of early bud stage coupled with early emergence of flea beetle resulted in higher than normal damage from flea beetle and some areas also experienced heavy Japanese beetle pressure. The low numbers of multicolored Asian lady beetle at harvest contributed to increased grape quality.

## NGP Team Profile: Bill Nail



*Bill is an Assistant Scientist with Department of Forestry and Horticulture in the Connecticut Agricultural Experiment Station. He conducts applied viticulture research in support of the winegrape industry in Connecticut and greater New England. Current studies include cultivar selection, rootstocks, training methods, and graft union height.*

### 1. When and how did your interest in horticulture, and more specifically, viticulture, develop?

I was originally a self-taught horticulturist, growing specialty vegetables and herbs on family land near Houston, TX, and selling directly to restaurants. This was before the whole “locavore” movement took off. I got my M.S. from Texas A&M working with pecans, and was looking into various Ph.D. programs when I learned of an opening at Michigan State with Stan Howell. I had always been interested in grapes and wine, so it seemed like a good fit. Stan and I hit it off immediately, and my time in Michigan was very rewarding. I will be forever grateful to Stan for the opportunity to work at Michigan State.

### 2. What is your role in the Northern Grapes Project?

We have St. Croix at a commercial grower’s vineyard with four different training systems (VSP, HRU, GDC, and Scott Henry) at both six and eight foot spacing. This is used both for research and demonstration. Our two NE-1020 plots in Hamden and Windsor are also evaluated as part of the Northern Grapes Project.

### 3. Tell us about your position with the Connecticut Agricultural Experiment Station. What sort of research do you do?

Upon arrival in Connecticut in 2004, there was no active viticulture program in the state. I have established several new

plantings as well as doing research in private grower’s fields. Several studies are underway to determine best management practices for grapevine cultivation in Connecticut. These involve cultivar and clone selection, pruning and training systems, spacing and trellising systems for new cultivars, cultural manipulation of fruit set, and the effect of high graft unions on vine performance.

### 4. What is the current status of the grape and wine industry in Connecticut?

The Connecticut wine industry has grown by 50% in the last eight years, and more farm wineries are likely to open in the foreseeable future. It is a small, but successful and growing industry. The wineries vary in size from five to 40 acres. Most wineries rely on direct sales for the majority of their business. Coastal wineries (those within 10 miles of Long Island Sound or the Atlantic), can successfully grow cool-climate vinifera. More inland wineries typically grow a mix of hybrids and vinifera, although freeze damage on vinifera is common in severe winters.

### 5. In your opinion, what is the most exciting research-based information that will come out of the Northern Grapes Project?

The new *Vitis riparia*-based cultivars have different growth habits and fruit chemistry than more traditional cultivars. Being relatively new, there is a lot to learn about how to treat them both in the vineyard and in the winery. The results of this research will help determine best management practices in the vineyard. I’m also excited about the enological aspect of the project, which should give winemakers a solid foundation about how to treat these cultivars in the cellar.

# NGP Team Profile: Lorraine Berkett



*Lorraine is an Extension Professor in the Department of Plant and Soil Science at the University of Vermont. She conducts research and outreach programs in cold climate grape production. Her education and experience is in plant pathology and entomology and she has been involved in IPM for many years.*

**1. You worked with apples the majority of your career. When and how did you first start working with grapes, and what have you enjoyed most about working with grapes?**

I have worked in Apple IPM, both in research and extension, since 1983. The extension portion of the University of Vermont (UVM) Cold Climate Grape Program started in 2004 and included vineyard visits and the development of a [Cold Climate Grape Newsletter and Website](#). At that time, Dr. Elena Garcia covered horticulture and I covered disease and insect management. Ever since Dr. Garcia accepted a position at the University of Arkansas, I have been the only faculty member in the UVM Cold Climate Grape Program. In 2007, the research vineyard at the UVM Horticulture Research Center was planted. It is part of the NE1020 project and represents the coldest winter and coolest growing conditions of any of the NE-1020 vineyards. I equally enjoy three things; working with Vermont grape growers, continuing to learn how best to manage the diseases and insects that affect quality grape production, and enjoying wine made from cold climate grapes!

**2. What is your role in the Northern Grapes Project?**

I oversee UVM's research contribution to Objective 1 of the Northern Grapes Project, where we are evaluating cultivar performance in the NE-1020 trial in Vermont. A description of the vineyard and some of the data collected this year are posted on our [website](#). I am also involved in Objective 2 which is to "develop and optimize viticultural practices that allow sustained production of high quality fruit from cold-climate cultivars." And, finally, I am involved in project outreach in the state.

**3. What is the biggest challenge facing the vineyards and wineries that are growing the cold-hardy grape cultivars, especially in the Northeast US?**

Spring frosts and cool, wet summers with potentially lower GDD are significant challenges to the production of the quantity and quality of grapes needed by the ever-expanding cold climate grape industry in the state.

**4. Tell us a little bit about the viticulture "team" at the University of Vermont. What role does each person have?**

Our effort at UVM is truly a team effort! Terry Bradshaw and Sarah Kingsley-Richards are key members of the UVM Grape Team—both have Master's Degrees from the Department of Plant & Soil Science and each bring multiple strengths and expertise to the program. We also have one to two undergraduate students working with us during the summer to gain valuable "hands-on" experience in grape production and research methods.

**5. In your opinion, what is the most exciting research-based information that will come out of the Northern Grapes Project?**

It is exciting that the *Northern Grapes Project* has such a multi-layered, unique breadth and depth of coordinated research being conducted—spanning research in the vineyard, in the laboratory, and in the winery. I think the most exciting research-based information that will be generated by the project will be how to optimally grow high quality cold climate wine grapes which will then be made into quality wine.

# NGP Team Profile: Sonia Schloemann



*Sonia is the Extension Fruit Specialist in Department of Plant, Soil, and Insect Sciences at the University of Massachusetts. She works mainly with small fruits, including grapes. Sonia has worked extensively with the New England wine grape growing industry for the last 15 years.*

## **1. Tell us a little about your role at the University of Massachusetts.**

I'm the UMass Extension Small Fruit Specialist with statewide responsibilities. I work mostly with farms that grow strawberries, blueberries, brambles or grapes, though there are some farms that produce less common fruit like elderberries, or currants and gooseberries.

## **2. How did you first get involved in grape extension and research and how did you become involved with the Northern Grapes Project?**

In the early 1990's I began working with some of the well-established successful vineyard-winery operations in coastal regions of Massachusetts. These pioneer vineyards had relied on information from other states and regions like New York, or even California, to get them started. But, it wasn't always easy to transpose that information to the local conditions. We developed some in-state resources for these vineyards, ran some educational programs, developed some local management recommendations and got some foundation plantings of wine grapes established at the UMass Cold Spring Orchard Research and Education Center. The first planting was two half-acre blocks of Frontenac and Chardonnay where we hoped to do some replicated trials. Next came a variety block with nine cold climate varieties in a randomized planting in collaboration with the NE-1020 project (Multi-state Evaluation of Winegrape Cultivars and Clones). This is the block that forms the basis of our work with this Northern Grapes Project. We also have two plantings of seedless table grapes alongside our wine grape plantings. Together all these plantings serve as examples of what can be grown in our New England climate and as a learning lab for students and others to learn how these varieties grow and are managed.

## **3. You work closely with local grape growers and winery owners in your area to maintain your grape research blocks. Can you tell us a little more about that?**

We currently have about 1.5 acres of grapes planted, but little funding to support their maintenance. We need to pay for labor, fertilizer and crop protection materials, as well as trellis repairs and equipment needed to keep the vines in production. Sometime we even need a volunteer labor force to help deal with routine tasks (like pruning) or weather events (like hail) to save the crop. So, we look to the industry for help. First, to generate revenue, we sell all the wine grapes we produce each year to local winery operations. The grapes are sold on a "PYO" basis, so the buyers spend time with us in the vineyard and learn more about us, the facility, and the research we're doing while they pick. So, not only are we generating revenue but we're also creating a network or community of people who are informed and interested in what we do and willing to help at times when we need it. There are other benefits gained from this arrangement, too. The winery folks get some hands-on experience in the vineyard with the new varieties, which helps them learn more about how they grow. We get feedback from them on how easy or difficult they are to work with in the winery, and how their customers respond. We also get direction from the industry on what the research/education needs are as they become more familiar with the new cold climate varieties.

## **4. What is the current status of the grape and wine industry in Massachusetts?**

According to the Mass Dept of Ag Resources (MDAR) in their [2011 Winery Snapshot](#), there are 40 licensed Farm Wineries in Massachusetts. There may very well be another handful added since that report was written. Many of them belong to the Massachusetts Farm Winery & Growers' Association and their profiles (complete with videos) can be seen the [Association's website](#). Most of these are grape based wineries but some are apple or cranberry based, while still others have a wide range of fruits that are used in the winery. We have a wide range of vineyard and winery businesses. The older operations have 30 to 100 acres of *V. vinifera* grapes and are located in the coastal regions of southeastern MA (e.g., Westport Rivers Winery) and sell through wholesale and retail channels and have robust ancillary businesses such as restaurants, events, festivals, etc. With the introduction of the

cold climate varieties, many more smaller scale operations (under 20 acres) are finding their place in the tapestry of Massachusetts' agriculture. Some come into it from a history of home winemaking ("A hobby run amok!" as one person once told me), and some are converting existing farm operations into businesses that are attractive to the younger generation and helps keep the farm in the family. In either case, there is a steep learning curve both in the viticulture knowledge and skills, as well as the winemaking to make their enterprises successful. Our Extension program seeks to meet all these needs in a variety of ways.

## The Northern Grapes Project is on Facebook!



We post updates about workshops, field days, webinars, newsletters, and more!

## Upcoming Events

**What:** [Illinois Grape Growers and Vintners Association Conference](#)

**When:** 1/31/13 to 2/2/13

**Where:** Crowne Plaza Hotel, Springfield, IL

**What:** [Viticulture 2013 and the Northern Grapes Symposium](#)

**When:** 2/6/13 to 2/8/13

**Where:** Rochester Riverside Convention Center, Rochester, NY

**What:** [Michigan Grape and Wine Conference](#)

**When:** 2/13/13 to 2/15/13

**Where:** Kellogg Hotel and Conference Center, East Lansing

**What:** [Minnesota Grape Growers Association Cold Climate Conference](#)

**When:** 2/21/13 to 2/23/13

**Where:** Crowne Plaza St Paul Riverfront- St Paul, MN

**What:** [16th Nebraska Winery and Grape Growers Conference](#)

**When:** 2/28/13 to 3/2/13

**Where:** Holiday Inn, Kearney, NE

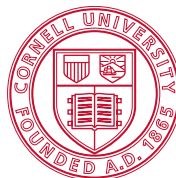
**What:** [Iowa Wine Growers Association Annual Conference](#)

**When:** 3/14/13 to 3/16/13

**Where:** West Des Moines Marriott

## 5. In your opinion, what is the most exciting research-based information that will come out of the Northern Grapes Project?

Some of the most useful results from this Northern Grapes Project for Massachusetts growers will be the comprehensive information about the performance of these new varieties under a wide range of conditions. Information on both the performance of the vines and response to different management practices and then the performance of those grapes in the winery will be immensely useful for these new vineyard winery businesses.



Cornell University

© 2012



Visit our sister site

[eViticulture.org](#)

eViticulture.org is the national online viticulture resource containing the latest science-based information for viticulturists.



Visit us on-line at

[www.northerngrapesproject.org](http://www.northerngrapesproject.org)



The Northern Grapes Project is funded by the USDA's Specialty Crops Research Initiative Program of the National Institute for Food and Agriculture, Project #2011-51181-30850