

Cornell University Cooperative Extension

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Grape News

Monthly updates:

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Phenology Update

Hudson Valley

Veraison is well under way in the Hudson Valley. Marquette was recently harvested in parts of the Lower Hudson

Valley. Early *vinifera* harvest has started, with Pinot Noir being harvested from younger vines. *Vinifera* fruit on more mature vines are still developing. Earlier this week at the Hudson Valley Research Lab in Highland, La Crescent, Foch and Leon Millot were harvested.

Champlain Valley

The hot weather this growing season has advanced maturity very quickly in the Champlain Valley. Degree Day accumulation is much higher (over 100 DD higher) this year than the 30-year norm; heat accumulation is also higher this year than last year at time. As of Sept 13, the DD accumulation for 2016=2262.1, 2015=2249.5, 30 yearr avg=2145.0. A very warm week following Labor Day accelerated berry ripening. Early white varieties (Leon Millot, La Crescent, Edelweiss) are ready for harvest with Brix >20 in many vineyards. Other varieties are right behind. Cool

weather this week will likely slow things down a bit. Fortunately, the rest of this week we are finally supposed to getting some fall-like weather and things should slow down a bit. Nighttime temperatures will be in the 50s and highs below 70.

Temperature and Rain for July 2016

Eastern NY Commercial

Horticulture Program

Weather Station	2016	30 Year average
Chazy	1912	2054.0
Peru	1947	2081.3
Willsboro	1943	2050.9
Clifton Park	2271	<mark>24</mark> 45.3
Hudson	2379	2561.7
Highland HVL	2261	2599.0
Riverhead	2525	2863.5

Degree Day Accumulations (Base 50)

Weather Station	Avg Temp (F)	High Temp (F)	Low Temp (F)	Rain- fall (in)	DD Base 50 Jan 1 – Aug 31
Chazy	71.2	86.9	51.2	3.15	1887.5
Peru	71.6	89.3	55.6	2.02	1907.6
Willsboro	71.0	89.7	52.7	2.73	1884.4
Clifton Park	73.7	93.2	50.4	3.63	2258.4
Hudson	73.9	95.7	49.6	4.59	2369.1
Highland HVL	74.6	92.1	51.6	3.01	2402.5
Riverhead	78.4	96.3	59.2	2.19	2641.3

Insect and Disease Pest Management

The drier weather is helping to keep disease pressure lower. There is still some downy mildew in local vineyards, and growers are evaluating whether or not they need to

apply a fungicide before harvest. Botrytis also appears to be at a minimum, even with heavy bird pressure. Yellow jackets and wasps are abundant in any place where there has been berry damage; they are attracted to the opened berries, and are not typically the primary cause of damage. Long range forecasts show the dry weather hanging around for another week or two in the Hudson Valley. In the Champlain Valley, weather has also been dry, with isolated showers over the weekend and mid-week. The dry weather will certainly make harvest easier and help keep disease pressure at a minimum. Weather can change quickly, it's always best to bookmark your favorite weather service page(s) and check back frequently for the most up to date information. Several of our go-to's are Weather

Underground, NOAA, and Accuweather.

The birds are still around and causing issues for growers, with continued reports of higher and more aggressive populations than in previous years. Most growers, by now have netted their vineyards and have also deployed multiple scare devices (balloons, air dancers, Mylar tape, etc.). Wild turkeys are on the move and have started to make their way into some vineyards. Netting does help, but in some instances growers report it not being enough. There is a fall hunting season for Turkeys in New York and this may help to reduce pressure in vineyards. Follow the link to the NY DEC to read the appropriate regulations. http:// www.dec.ny.gov/outdoor/29461.html

	Date	Marquette			Front	Frontenac Front			tenac gris		La Crescent		
		Bri	pН	ТА	Bri	pН	ТА	Bri	pН	ТА	Bri	pН	ТА
2016 Weekly Maturity Progress	Aug 12	x 14.0			x 15.0	•		x 13.0			x 13.5		
in the Champlain	Aug 16	14.0			14.0			14.0			15.0		
Valley – Willsboro Research Farm	Aug 22	16.5			16.0			15.9			16.2		
	Aug 29	16.6	2.93	18.7	15.2	2.89	21.4	15.3	2.91	20.4	16.1	2.96	20.0
	Sept 5	21.6	3.02	17.0	19.5	2.99	18.8	20.2	2.99	18.3	20.0	3.07	15.9
	Sept 12	23.5	•	•	21.5	•	•	20.5	•	•	22.5	•	

Veraison to Harvest 2016

Chris Gerling and Tim Martinson, Co-editors

Now in its 10th year, Veraison to Harvest is a joint project of the Lake Erie, Finger Lakes, Eastern New York, Long Island and Statewide grape extension programs and the Cornell Enology Extension program. Each week we provide basic fruit composition information from 80 (this year) vineyards across New York – along with updates from each region and features on research and extension projects across the state

Our thanks to the New York Wine and Grape Foundation and the Lake Erie Regional Grape Program, Inc. - a group of juice and wine processors that funds projects through a voluntary tonnage-based contribution. We couldn't produce this newsletter or do the fruit sampling without financial support from these organizations.

Look for the Veraison to Harvest publication weekly. We will be sending it out via the ENYCHP email list!

Measuring Vine Water Status at two Finger Lakes Vinevards

Tim Martinson, Justine Vanden Heuvel, Ming-Ye Chou, Raquel Kallas and Alan Lakso

While signs of mild to moderate water stress are visible in most Finger Lakes vineyards, growers generally don't have the means to measure it. Justine Vanden Heuvel's students, however have been measuring water status of vines in research plots in a couple of vineyards in the Finger Lakes, where Justine and her students are studying the effect of under-the-trellis cover crops on vine growth, water status, and



yield/quality.

Stem water potential is a measure of how much pressure is required to push water out of a leaf. As the soil dries and water in the xylem (water conducting vessels) is under more tension, it takes more pressure to force water out of an excised leaf like sucking a thick milkshake out of a straw instead of water. It's measured with a device called a pressure bomb, right, (see The Pressure Chamber (the Bomb) for

an explanation, <u>http://fruitsandnuts.ucdavis.edu/</u> pressure_chamber/).

Stem water potential becomes more negative the more water-stressed the vines are. As a general rule of thumb, at higher than -10 bars, vines suffer little water stress. At -16 bars or lower, vines are suffering severe water stress (Keller 2010, Chapter 7.2), Growers practicing regulated deficit irrigation in California will start their first irrigation when SWP reaches about -12 bars (see <u>Prichard 2015</u> for a discussion of regulated deficit irrigation in California, <u>http://ucanr.edu/sites/ce_san_joaquin/files/35706.pdf</u>).

Stem water potential (SWP) was measured at two sites last week under different cover crop treatments. Site 1 has deep, gravelly loam soils (Howard) with high water holding capacity. Site 2 has shallower soils (Lordstown) with low water holding capacity. Note that the average SWP at site 1 across the floor treatments was around -9 bars, while the average SWP at Site 2 was around -15 bars. While there were some apparent differences due to the cover crop

Soil water holding capacity and drought stress: These figures illustrate the huge differences in drought stress that vines are experiencing depending on the water holding capacity of different soils, which varies with soil texture and soil depth. Silty-loams hold about 3 in of water per foot of soil; Loamy sands about 1.2 inches/foot. At this time of the year, it's estimated that mature vines use somewhere around ³/₄ to 1 acre-inch of water per week. The Howard soils at Site 1 range from 3-6 ft deep, while the soils at Site 2 are estimated to be 2-3 ft deep and very gravelly. Thus, the Riesling vines at Site 1 are experiencing only mild water stress, while the Noiret vines at Site 2 are experiencing moderate to severe water stress. At both sites, the Fescue treatment seems to have resulted in less water stress than the other treatments, but the soil characteristics played the dominant role in the vines' water status at these sites this year.

Cuisine Trail Progress in Northeastern NY Jay White, Boquet Valley Vineyard

Over the past several months, producers and CCE specialists have been working hard to develop a new marketing opportunity for local producers – *cuisine trails*! Establishing clearly defined cuisine trails will offer the opportunity for individual businesses to promote themselves. The trails also represent a 'banding together' of local businesses in an effort to bring recognition an area regionally, nationally, and even internationally as an agrotourism destination. Much has happened with the cuisine trail effort since my last message, so I wanted to update you on our progress. First, the Adirondack Cuisine Trail Association (ACTA) has passed a critical milestone with the submission of six (6) cuisine trail applications to the NYS Department of Agriculture and Markets! They are:

- Essex County Champlain Valley Cuisine Trail and Ausable Valley Cuisine Trail
- Franklin County Adirondack Lakes Cuisine Trail and Northern Franklin County Cuisine Trail.
- Clinton County Northern Adirondack Coast Cuisine Trail and Central Adirondack Coast Cuisine Trail.

These six applications represent significant and outstanding work by some very dedicated individuals. In Essex County, our working group included Dan Rivera, Cynthia Johnson, Nancy Belluscio, Wendy Knight, Monica McGaughey, Josh Bakelaar, Sarah White and Anita Deming. In Franklin County, Ernie Hohmeyer, Shannon O'Bourne from Paul Smiths College and CCE Executive Director Rick LeVitre organized the effort. And in Clinton County, North County Chamber of Commerce Group Marketing Specialist Alyssa Seneca and County Legislator Chris Rosenquest lead the way.

A special thank you goes to Lindsay Pashow, Cornell Cooperative Extension Marketing Specialist, for assisting both Essex County and Franklin County with the applications. She ran the roads through both counties collecting letters of support, attending meetings and worked on creating maps for the trails.

Also, I'd like to recognize Kim Reilly, Vice President of Marketing for ROOST and Alyssa Senecal for developing a marketing plan for the trails. To have ROOST and the Chamber both onboard for promoting the ACTA trails is powerful indeed and will go a long way toward telling our cuisine story successfully.

And so, we wait! Representatives from Ag and Markets have said we should be hearing from them around September 1st with their preliminary review of the applications.



Jay White, president of the board of directors of CCE of Clinton County presents the idea of a Cuisine Trial. Photo: Sun Community News



Note: Additional County Requests Are Pending

Governor Andrew M. Cuomo today announced that 24 counties across Upstate New York have been designated as a natural disaster area by the federal government as a result of this summer's drought. These designations mean that farmers in those areas

may be eligible for assistance, including emergency loans, from the United States Department of Agriculture Farm Service Agency. Additionally, State Agriculture Commissioner Richard A. Ball, state lawmakers and other farm leaders will be conducting on-site assessments of farms affected by the drought, while the state works closely with Cornell University expert hydrologists and climate professors to help understand and study the outlook for recovery.

"Strong agriculture is critical to the vibrancy of Upstate New York and this year's hot, dry summer have created significant challenges to this crucial industry," Governor Cuomo said. "From Western New York to the North Country, New York's growers and producers are major drivers of our economy and the benefits they provide to the community are immeasurable. In these difficult times, we must ensure that they have full access to all the resources necessary for making a full recovery."

"Our hearts go out to the farmers and ranchers affected by the drought in New York," said United States Agriculture Secretary Tom Vilsack. "President Obama and I are committed to ensuring that agriculture remains a bright spot in our nation's economy by sustaining the successes of America's farmers, ranchers, and rural communities through these difficult times. We're also telling New York producers that USDA stands with you and your communities when severe weather and natural disasters threaten to disrupt your livelihood."

Disaster declaration is based on reporting of crop loss to the federal Farm Service Agency and a D3 designation by the U.S. Drought Monitor. The federal government declared 15 counties as primary natural disaster areas and an additional nine counties as contiguous disaster counties due to a recent drought. In addition, several other counties in the North Country, the Finger Lakes, Central New York, and the Southern Tier regions are also requesting primary disaster declarations.

The primary counties included under this designation are in Western New York, Finger Lakes, Central New York, and Southern Tier and they include: Western New York Erie Niagara **Finger Lakes** Genesee Livingston Monroe Ontario Seneca Wyoming Yates **Central New York** Cayuga **Southern Tier** Chemung Schuyler Steuben Tioga Tompkins

The federal government also named nine counties in the Finger Lakes, Western New York, Southern Tier, and Central New York as contiguous disaster counties. They include:

Western New York
Allegany
Cattaraugus
Chautauqua
Southern Tier
Broome
Central New York
Cortland
Onondaga
Oswego
Finger Lakes
Orleans
Wayne

In addition, the New York State Department of Agriculture and Markets will continue to work with its partners in monitoring the drought situation and its effect on New York farms in these and other counties across the State, including in the North Country, Capital Region and on Long Island. The Department will also tour affected farms in Western New York, the North Country and the Southern Tier.

A disaster designation makes farm operators in primary counties and those counties contiguous eligible to be considered for certain assistance from the Farm Service Agency, provided eligibility requirements are met. This assistance includes emergency loans. Farmers in eligible coun-

In addition, the New York State Department of Agriculture ties have eight months from the date of the disaster declaraand Markets will continue to work with its partners in montion to apply for emergency loans.

> The Farm Service Agency considers each emergency loan application based on the extent of production losses on the farm, and the security and repayment ability of the operator. Local FSA offices can provide affected farmers with further information. Contact information for the offices can be found here.

> Source: <u>https://www.governor.ny.gov/news/governor-</u> <u>cuomo-announces-disaster-declaration-24-counties-across-</u> <u>new-york-state-assist-farmers</u>

Vineyard Cover Crops Save Expense, Environment Matt Hayes, Cornell University

Cornell University researchers have advice for vineyard managers in cool and humid climates like the Northeast: cover up.

Maintaining bare soil beneath vines has long been accepted management practice to stifle competition from other vegetation, preserving water and nutrients to optimize grape growth. Exposing soil beneath trellises has been achieved by using extensive herbicide treatments, a practice that is expensive and potentially damaging to the surrounding vineyard ecosystem and locations downstream due to runoff.

Excessive vine growth can result as a function of the lack of competition for water and nutrients, requiring costly canopy management practices in the vineyard to maintain fruit quality.

Planting cover crops under grapevines instead can remediate these problems, according to researchers at Cornell's New York State Agricultural Experiment Station in Geneva, New York. A series of studies led by Justine Vanden Heuvel, associate professor in the Horticulture Section of the School of Integrative Plant Science, provides vineyard managers with an environmentally sustainable alternative to herbicide treatments in cool and humid climates while tamping down the cost associated with unnecessary herbicide use.

Researchers grew buckwheat, annual ryegrass, white clover and an assortment of local plants known as native vegetation over a period of three or four years, in a one-meter wide strip to see how the grape vines fared as an alternative to maintaining bare ground through either herbicide or cultivation.

Their findings showed that growing cover crops beneath grape vines reduced nitrogen leaching through the soil compared to the herbicide plots. Dissolved organic carbon (a proxy for soil breakdown) was lower in the cover crop plots, and the neonicotinoid insecticide Imidacloprid which has garnered attention for its harmful impacts on honey bees and other pollinators — was found in fewer leachate samples and at lower concentrations in the cover crop plots compared to the herbicide treatments.

Not only does a reduction in herbicide benefit the environment, it also has economic ramifications for vineyards as well. Vanden Heuevel said the cost of seeding and maintaining most cover crops is estimated to be less than using herbicides, saving vineyards money while protecting the environment from excessive herbicide applications.

"With the ample precipitation that the Northeast receives in most years, there is little reason to be using herbicides in mature wine grape vineyards," said Vanden Heuvel.

Some of the cover crops also proved a useful tool for reducing vine growth in newer vineyards. Excessive vine growth, known as vigor, can shade the fruit from the sunlight it needs to produce desirable flavors and aromas. While cover crops had little impact on mature vineyards, the researchers found reduced vine growth and yield in younger vineyards, likely as a result of shallower root systems competing with the cover crops. Both those qualities can prove advantageous: less dense vines increase sun exposure on the fruit, improving quality of the grape, and many winemakers prefer lower yields. Deploying cover crops in a vigorous vineyard could potentially provide a level of control that helps growers achieve a balanced vine, according to Vanden Heuvel.

The studies were published in the journals HortTechnology, the American Journal of Enology and Viticulture and the forthcoming issue of HortScience. Graduate students Lindsay Jordan, M.S. '14, Adam Karl, M.S. '15 and Rebecca Hervieux, M.P.S. '12 contributed to the work.

http://fruitgrowersnews.com/news/vineyard-cover-cropssave-expense-environment/

And now there are 10 (AVAs that is) – Champlain Valley of NY AVA Bill Dowd, Times Union

New York State, and by extension the United States, is getting a new American Viticultural Area (AVA). The appellation "Champlain Valley of New York" was approved this week by the federal Tax and Trade Bureau and will take effect on September 21, according to the <u>Federal Register</u>. It covers about 500 square miles of Clinton and Essex counties ranging from the Canadian border to Ticonderoga.

The AVA system is designed to recognize distinct grapegrowing areas and help consumers identify the origins of different wines. Wineries in such areas are allowed to use the AVA terminology on the labels of any of their wines made from at least 85% of grapes grown in the region.

The new Champlain Valley New York AVA is planted with extremely cold-hardy "Minnesota" grape varieties, a term that refers to hybrids developed by researchers in Minnesota but also in New York. Among them are Marquette, Frontenac, and LaCrescent. The inclusion of "New York" in the AVA title is to differentiate it from that part of the valley that extends into neighboring Vermont.

The Lake Champlain Grape Growers Association is crediting Colin Read for the bulk of the work in securing the appellation, which was filed for last summer. Read and Natalie Peck own the Champlain Wine Company. Its tasting room and store is located in downtown Plattsburgh, and sells wines made from grapes grown in their vineyard in Mooers. They also recently added a line of products under the Adirondack Coast Oil & Vinegar Company brand.

Champlain Valley New York is the 10th AVA in the state. The others are, from east to west: Long Island, North Fork of Long Island, and The Hamptons Long Island; the Hudson River Region; the Finger Lakes, Seneca Lake, and Cayuga Lake; the Niagara Escarpment, and Lake Erie. Most, if not all, of the wineries covered by the new appellation are members of the Adirondack Coast Wine Trail, established in 2013.



Full article: <u>http://blog.timesunion.com/dowdondrinks/</u> and-now-there-are-10-avas-that-is/20219/

Northern NY Farm Internship and Management Program

Helping Northern NY agriculture find future managers and quality help. Kelsey O'Shea, CCE Northern NY Regional Team



Kelsey O'Shea, Ag. Business Development Specialist

At this time of year, there is a push to get a lot of things done in the vineyard in a small window of time. Finding the manpower to do it can be a challenge. We caution you against using 'volunteers' due to recent lawsuits that have been brought against vineyards in California for using unpaid labor. However, it can be difficult to find skilled, temporary labor that will work for the wages a young business can afford to pay.

To help with this situation in future seasons, Kelsey O'Shea of the CCE Northern NY Regional Team, has created an internship program to connect farm businesses with students at ag universities. While it's too late to use this program for grape harvest this year, this is a good time to be thinking about your needs for future seasons.

Meeting Your Needs

The purpose of this program is to connect farm businesses with students at ag universities. Our goal is to help ensure that farms in Northern NY are finding the quality interns and managers that are needed for the next generation on their operations. We recognize that most farm owners are looking for quality help, but are so busy with operations that there is little time to develop and manage job postings online. This is where our technology and expertise will

meet operators' needs.

The Basics:

• A centralized online location to post internship and job opportunities.

- Help developing an attractive, professional posting.
- Universal applications for students.
- Connections to more than six universities.

The Dirt on the Program

The basic questions answered.

Q: Is there a cost to participate?

A: No; the first year of the program, participation, and posting is free.

Q: Can I only post intern positions, or can I post full-time positions too?

A: You can post both intern positions or full-time positions. There will be two separate areas on the online platform for those postings and we will help you craft the best posting to attract the right people.

Q: Does my farm have to participate every year? A: No; you can participate one year and if you don't feel you need an intern again, you can not post the next year.

Q: Will everyone have access to our farm's contact information?

A: No; personal contact information will be kept private. Students will be able to submit applications through the online portal that are then sent directly to an email of your choosing.

Q: Who do I contact to get involved in this program? A: Kelsey O'Shea is the Regional Ag Business Management Specialist who is managing this program. You can get ahold of her by phone or email using the contact information below. She is ready and willing to meet with you on the farm to develop your internship or job posting.

2016 Finger Lakes Grape Price List

The 2016 Finger Lakes Grape Price List is available for download. We received prices from twelve buyers, and we thank them for submitting their prices to us. Keep in mind that the average price listed for each category and variety is NOT a weighted average based on tons purchased, but merely the average of the stated prices.

Average prices that are lower than 2015 are shaded in red, prices that are flat (plus or minus 0.5%) are shaded in yellow, and those that are higher than last year are shaded in green.

If you have any questions about the Price List, please don't hesitate to contact our office.

http://nygpadmin.cce.cornell.edu/uploads/doc_46.pdf



Stephen Casscles, wine maker at Hudson Chatham Winery in Ghent, NY and grape grower since 1976 recently published a book. Titled, "Grapes of the Hudson Valley and other Cool Climate areas," and is available for \$30.00 from Flint Mine Press.

From Stephen Casscles, "It is really a text book that covers 172 grape varieties. It is good for growers who want to know how to grow it, winemakers that want to make wine from it, wine consumers, and grape breeders. It is organized differently than other grape books. It is done by hybridizer and has their bios, and the goal of the hybridizer. so there are chapters on Baco, Seibel, Cornell varieties, Minnesota hybrids, and those developed in the Hudson Valley (a real lot of them). It is a field guide that is 230 pages."

Resources for Cold Climate Vineyard IPM

Cornell IPM Fact Sheets for Grapes http://nysipm.cornell.edu/factsheets/grapes/default.asp

New York and Pennsylvania Pest Management Guidelines for Grapes (published annually) http://store.cornell.edu/p-189430-2015-new-york-and-pennsylvania-pest-managementguidelines-for-grapes.aspx

Grape Disease Control, 2015. Dr. Wayne Wilcox (published annually) <u>http://rvpadmin.cce.cornell.edu/uploads/doc_308.pdf</u>

Cornell Vineyard Spraying Website http://web.entomology.cornell.edu/landers/pestapp/grape.htm

Integrated Pest Management Strategy for Cold Climate Winegrape Growers. Lorraine Berkett http://www.uvm.edu/~fruit/grapes/gr_ipm/AnInitialIPMStrategy.pdf



Serving the educational and research needs of the commercial small fruit, vegetable and tree fruit industries in Albany, Clinton, Columbia, Dutchess, Essex, Fulton, Greene, Montgomery, Orange, Putnam, Rensselaer, Saratoga, Schoharie, Schenectady, Ulster, Warren and Washington Counties

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