



Nebraska VineLines

UNIVERSITY OF
Nebraska
Lincoln EXTENSION

University of Nebraska Viticulture Program

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HARVEST FIELD DAY ENLIGHTENING, EDUCATIONAL

The Harvest Field Day held at Hundred Hills Vineyard (formerly Oak Creek Vineyard) on August 8, 2022 was highly successful and a great educational event according to attendees. The event was sponsored by the University of Nebraska Viticulture Program (UNVP) and the Nebraska Winery and Grape Growers Association (NWGGA). All in attendance indicated that their level of knowledge was increased by the discussions on Harvest Timing, Crop Estimation and Adjustment, Harvest Labor, and Machine Harvesting.

The latter topic was addressed by the host and President of the NWGGA, Kara Sousek, who demonstrated the workings of the New Holland machine harvester that she uses in her vineyards and for custom harvesting of other growers' vineyards. Considerations of design for mechanization and related harvest issues were discussed by UNVP personnel, including Steve Gamet, whose family co-owns another type of mechanical harvester (Korvan) that they use for harvesting vineyards in western Nebraska.

Not only did the participants in the Harvest Field Day indicate that their knowledge was enhanced by the field demonstrations and discussion, but several said that they plan to modify their trellis design and vine spacing, manage their harvest timing better, and make other changes as a result

of participating in the field day. When queried about the thing that they liked best about the field day, several responded that interaction with fellow attendees and relaxed comfortable discussions were a highlight. Additionally, comments included "Great knowledge", "loved the in-vineyard experiences", "learning about the .55 constant" (when fermenting wines to dryness), and understanding the potential for foliar application of micronutrients. In addition, post-harvest management was discussed, including the importance of disease management ("you can't just harvest the fruit and walk away and forget about the health of the vines").



Attendees at the Harvest Field Day viewing demonstration of the machine harvester.

NEBRASKA'S NEWEST WINERY HOLDS "GRAND OPENING"

On August 11, 2022, **Front Porch Vineyards** held a "Grand Opening" to introduce Nebraska wine lovers to their venue near Crab Orchard, Nebraska and to introduce five new wines produced at their winery. Front Porch vineyards provided tastings of "Baby Doll" (a white blend containing Edelweiss), "Southdown" (a rich red blend containing primarily Chambourcin), a Frontenac, an apple wine and a sangria. Owner Brad Barker explained the names "Baby Doll" and "Southdown" were in reference to the BabyDoll Southdown sheep employed for vineyard floor management. (Editors note: BabyDoll sheep were introduced to the Nebraska industry by a speaker at a UNVP conference several years ago.) Despite the hot weather, a great turnout of attendees took place filling the parking lots. Welcome, Front Porch Vineyard! Address of Front Porch Vineyard :[72351 608 Ave, Crab Orchard, NE](https://www.frontporchvineyards.com), Website: www.frontporchvineyards.com



Front Porch Vineyards "Southdown" wine

OFF TO A GREAT START: GRAPE QUALITY TEST SERVICE PROJECT

In a collaboration between the UNVP and the Innovation Campus's Food Processing Center, a grape quality testing service has been launched under the leadership of Dr. Changmou Xu, Research Associate Professor, UNL Department of Food Science and Technology. Co-PI **Paul** Read has been encouraging growers to participate in this project that he says has the potential to improve grower/winery relations and enhance quality of Nebraska wines. How does it work? Participating growers collect samples of approximately 100 berries for each cultivar to be tested three times starting from approximately two weeks after veraison, then one week later and again after two weeks. The berry samples are shipped overnight or dropped off at the UNL Food Processing Center and testing of degrees Brix, pH, titratable acidity, color, texture and polyphenols will take place to determine the maturity of the grapes. A report is emailed to the grower by the Food Processing Center within two days of receiving the berry samples. Shipping costs are born for the first five cultivars by the grant funds received by UNL for this testing program. This project is in its infancy, but holds great promise for elevating the quality of Nebraska wines. A further update of the project's progress will take place as data accumulate. Watch for more information about the UNL Grape Quality Test Service project in future issues of the Nebraska Vinelines, on our web site and a potential report at the Fall conference.

MORE HIGHLIGHTS FROM THE ICCWS

The International Cool Climate Wine Symposium that took place in St. Catherines, Ontario, Canada brought together viticulturists and enologists from all the wine regions that one normally thinks of producing cool climate wines (Germany, Finger Lakes, Michigan, New Zealand, and of course Canada's Okanagan region and Ontario's Niagara escarpment). But did you know that exceptional cool climate wines are being produced in Tasmania, Quebec, Nova Scotia, the United Kingdom, Pennsylvania, Vermont, and the Scandinavian countries? The ICCWS was certainly enlightening; Nova Scotia has a local white wine grape called

'L'Acadie' (very crisp and fruity), Quebec is using many of the same grapes bred by Elmer Swenson (e.g. 'Sabrevois'), Vermont's industry has embraced 'Marquette', and Pennsylvania has begun producing Gruner Veltliner' of a quality similar to its native home in Austria.

Elizabeth Volkavich, a professor from the University of British Columbia did a great job of relating climate change to the location of famous wine regions such as Bordeaux and the Napa Valley. Her projections showed that from 1951 to 1979 Napa's production area was north of Bordeaux's latitude, but with climate warming, Napa's production was near the middle of Bordeaux. She made similar comparisons by relating Oregon's Willamette Valley to Burgundy and the UK versus Champagne. The latter explained why UK wineries were competing favorably with Champagne now, while in the 1950-1979 timeframe, the UK was too cold to be producing grapes in the champagne style. She presented what she called "phenology shifts" showing that harvests in Bordeaux have become much earlier when compared with the previous 400 years (yes, the French have records of harvest dates, frost occurrence, timing of budburst and flowering dates for over 400 years!). She proposed that "phenology determines climate hazards", providing many examples including that high temperatures during the growing season lead to more sugar, less acid, changes in aromatic and phenolic profiles and therefore significant changes in wine quality and characteristics that may result from a warming climate. She postulated that with a global warming of 2 degrees Celsius (about 5F), suitability of Pinot Noir and Chardonnay for

Burgundy would be reduced as much as 50%, while similarly Cabernet and Merlot would no longer be as suitable for Bordeaux as is the current case. She gave lots of additional examples, ending with "Climate change is part of terroir!"

Maria Centenari, Pennsylvania State University researcher, gave a detailed discussion of cover crops in the vineyard using New York and Pennsylvania examples. Her work corroborates the work that Ben Loseke has done at Oak Creek vineyards. (As part of his PhD research, Ben showed that undervine cover crops provided ecological benefits such as erosion control, less herbicide needed, improved soil structure and increased biodiversity when used for established vines, but undervine cover crops are not recommended until the vines are at least three or four years old.) However, she has followed up with more studies of cover crop impact related to roots, using a rhizotron to study the impact of cover crops on root growth. She showed that grapevines shift roots deeper into the soil profile in response to cover crops (Editor's note: could this be useful with regard to water requirements and irrigation?) and that cover crops can be valuable to help reduce excess vegetative growth, but may decrease yield, depending upon cover crop species. Her studies also showed that cover crops tend to increase soil bacteria, but not fungi in the root zone. Lots of follow-up research is indicated, but for regions where excess vegetative growth may occur, it is clear that cover crops have a place in such vineyards.

Calendar

November 12, 2022 , Holiday TOAST, Fonner Park, Grand Island, NE.

May 12-13,, 2023, TOAST Nebraska, Stinson Park, Omaha, NE

May 17-18, 2024, TOAST Nebraska, Stinson Park, Omaha, NE



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