Fall Workshop: Instrumentation for Vineyards and Wineries

Dr. Tom Cottrell will headline the winery portion of the Fall Workshop on Instrumentation for Vineyards and Wineries. Dr. Cottrell is no stranger to the Nebraska wine and grape industry, having served as one of the main presenters at our first winemaking school, consulted with local wineries and spoken at the 7th Annual Winery and Grape Growers Forum and Trade Show in March. Tom will also share insights regarding Reflectoquant — the Dipstick System, and the Winemakers Database (WMDB). Dr. Cottrell, a native of Ithaca, NY, got started in the wine industry in 1970 in the Napa Valley, founding Cuvaison. Later he co-founded Pine Ridge Winery, and started several others as a consultant. In 1982, Dr. Cottrell came to Geneva, NY as Cornell’s first Associate Professor of Enology, became acquainted with winemaking in the East, and learned how to make 550 lots of wine in a season. Subsequently, he was the Manager/Winemaker for Chalk Hill Winery in Sonoma County, which he grew from 14,000 cases to 60,000 cases per year, and for Sakonnet Vineyards in Rhode Island, which he grew from 12,000 cases to 35,000 cases per year. Returning to Ithaca in 1995, Dr. Cottrell consults for wineries and winery start-ups in the Finger Lakes, on Long Island, Pennsylvania, and other parts of the East. He is also the eastern representative for Nadalie, USA, a French and American barrel producer, and for Lafitte Cork and Capsule. In his spare time, he writes articles for Vineyard and Winery Management Magazine.

Electronic Nose Technologies: A New Instrumentation Option for Wineries?

Recent research has yielded new technology for odor measurement that is finding increasing applications in the food and beverage industries. This new technology, commonly termed an "Electronic Nose" or E-nose, has the potential to yield beneficial results for the wine industry in Nebraska. E-nose technology can be used for product quality control. This includes monitoring for spoilage and freshness, measurement of batch-to-batch consistency, documenting premium brands, and testing the effect of additives. Research currently underway in Biological Systems Engineering is developing new methods for odor measurement using a Cyranose 320 handheld E-nose instrument. The instrument is slightly larger than a handheld calculator, and is able to create "smell prints", similar to finger prints, and then categorize various smells.

Does this concept intrigue you? Would you like to take part? Jodi Harper, graduate student under the direction of Dr. Wayne Woldt, Biological Systems Engineering at the University of Nebraska will be presenting a poster at the November conference to introduce the concept (and collect cork samples), and then Dr Woldt will present research results during the March conference.

And in the Vineyard. . . .

Did you know that there are over 100 weather stations in Nebraska? Is there one near you? What can this mean for the practical vineyard manager?

Dr. Ken Hubbard, Professor, School of Natural Resource Sciences here at UNL will present information about the how and why of weather station installations at research facilities in Nebraska, and how they fit into the bigger picture—the High Plains Weather Data System, the National Weather Service system, for example. Additional vineyard instrumentation discussions will be presented. Dr. Bill Waltman, will speak on “Climate, Weather and Instrumentation in the Vineyard” and will feature some of the latest information on vineyard instrumentation and what it means to the practical grape grower. Another aspect of vineyard instrumentation will
be presented by Marcus Tooze, President of the GIS Workshop. His topic will focus on imagery in the vineyard. Speakers from industry, including vendors of equipment and services pertaining to instrumentation in vineyards and wineries will also be featured at this informative workshop.

Just Getting Started – or “So You Want to Grow Grapes” –
Vineyard Establishment topics will be presented and will be geared toward helping people who plan to start a vineyard or have recently begun growing grapes. The day will conclude with a sampling of some of Nebraska’s finest wines. Be sure to mark your calendars and attend this important workshop! See a draft program elsewhere in this issue. Register Today!

The price for this timely workshop is only $45. This includes coffee and rolls during registration, break, lunch and the “ever popular” wine tasting at the close of the day and your parking. Pre-registration deadline is 10/29/04 – Registration is $50.00 after 10/29/04. For more information call Paul Read at 402/472-5136 or Donna Michel 402/472-8747. Or visit our web-site at: http://agronomy.unl.edu/viticulture.

Fall Vineyard Management
By Paul Read, Viticulture Professor

You thought now that harvest is over, you can relax? WRONG! Now is the time to tidy up the vineyard and follow-up on practices designed to help prepare the vines for winter and next year’s growth. Here are a few important tips:

- For young, newly-planted vines, the grow tubes (if used) should have been removed in August. If not, get them off ASAP! If left on too long, the vines fail to harden properly.
- Use no nitrogen fertilizers in late summer and fall. Nitrogen encourages soft new growth that can be vulnerable to cold damage. This applies to both foliar and soil applications.
- It is OK to apply non-nitrogen fertilizers if needed, based on soil and/or tissue analyses.
- Apply sprays for powdery and downy mildew, if needed. If left unchecked, these foliar diseases provide a high amount of inoculum for the next growing season and cause leaf degradation and premature abscission (leaf-drop), resulting in less healthy vines that harden poorly.
- Irrigation: to irrigate or not to irrigate? Because late season irrigation often causes soft new growth, we generally recommend not irrigating until leaves have died. After the vines have dropped their leaves, especially if soil moisture levels are low, it will become important to replenish soil moisture levels by applying irrigation. At this time of the year, even though the above-ground parts of the vines have stopped growing, the roots are still active and will benefit from the additional moisture.
- Bird damage. Many growers have experienced extraordinarily high damage from birds this year. Although no method is perfect for preventing damage by birds, fall is a good time to examine your options and order netting, scaring devices, recordings or other bird management purchases.
- New or replacement planting stock should be ordered now, especially cultivars likely to be in short supply (Brianna, Frontenac Gris, and LaCrescent, for example).
- Tidy up your vineyards. Tie up vines and cordon that have become loose, remove and dispose of dead and damaged canes and clean up the litter from the vineyard floor. Dead leaves, stems and fruit can harbor insects and diseases.
Summer Closes with a Bang

The Viticulture crew hosted four field days this summer; Burt and Washington Counties for the “Rolling Field Day”, visiting several growers and their vineyards in these counties; then the Second Annual Multi-State Viticulture Field Day at Kimmel Education and Research Center, in Nebraska City, NE.; the “Harvest Field Day” at the Research Vineyards in Nemaha, NE. and lastly an "Evening in the Vineyard", hosted by Jim Schild, Panhandle Research and Extension Center, Scottsbluff, NE. All in all, over 350 people attended University of Nebraska Viticulture Field Days. Thanks to all who made these possible – and a big “thank you” to the Extension Agents and Educators in the various counties.

Thanks to all that hosted and to all attending: University Extension Educators, Jim Peterson, Washington Co.; John Wilson, Burt County; Carol Ringenberg, Southeast Nebraska Extension Educator and Co-Host of the 2nd Annual Multi-State Viticulture Field Day. Gary Lesoing, Nemaha County, and Jim Schild, Panhandle Research and Extension Center, Scottsbluff, NE; Decanne and Tim Hrdlicka, Birdsong Vineyard; Rich and Marlene Mullins, Arlington, NE; Allen and Connie Falty, Tekamah; Deb and Rick Barnet, Big Cottonwood Vineyards; and Phil and June Simpson’s Silvercreek Hill Vineyards. Thanks also to Bob Curttright and Ron Haskett and all their crew at the Whiskey Run Creek Vineyard & Winery in Brownville, NE; and Curttright Commercial Vineyards in Nemaha, NE.

Thanks for all your hard work – we really appreciate it!--- The Viticulture Staff!

THE UNIVERSITY OF NEBRASKA VITICULTURE PROGRAM THANKS ITS CORPORATE SPONSORS!
Roots....

…the foundation upon which we are built. They serve not only to chart our past development but more importantly to nurture our future growth. At TURNBULL NURSERY INC we feel this is just as true about our grapevines as it is about us. Our strength is in our roots. Here it is not just a saying; it is the focus of everything that we do.

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fax: 716 337-0318
turnbull@prodigy.net

Double A Vineyards
10277 Christy Road
Fredonia, NY 14063

Phone: 716/672-9483

Double A Vineyards is a family owned operation that is dedicated to supplying you with quality grapevines. We began production in 1990 with a small number of cuttings and have grown to over two million cuttings this year. We have increased our variety list to over 75, with production of other varieties by request. I have been involved in the grape industry all of my life and would be more than happy to discuss varietal planting tips or cultural practices with you.
<table>
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<tr>
<th>Premium Wine Barrels</th>
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<tr>
<td>Keystone Cooperage</td>
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<tr>
<td>P O Box 269</td>
</tr>
<tr>
<td>Jefferson, PA 15344</td>
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<tr>
<td>724/883-4952</td>
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<tr>
<td>fax: 724-883-4060</td>
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<th>Reams Sprinkler Supply</th>
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<tr>
<td>Mike and Ron Bousquet</td>
<td>Steve Payton or Mike Switzer</td>
</tr>
<tr>
<td>6001 S. 57th St.</td>
<td>2300 South Twin Bridge Rd.</td>
</tr>
<tr>
<td>Lincoln, NE 68516</td>
<td>Decatur, IL 62521</td>
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<tr>
<td>(402) 423-0120</td>
<td>(217) 864-9896</td>
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</tr>
<tr>
<td>North Collins, NY 14111</td>
<td>Saint Paul, MN 55107-1827</td>
</tr>
<tr>
<td>(716) 337-3812</td>
<td>(800) 634-2843 for</td>
</tr>
<tr>
<td>fax: 716/337-0318</td>
<td>Viticulture technical Information</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:turnbull@prodigy.net">turnbull@prodigy.net</a></td>
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<tr>
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<tr>
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<tr>
<td>(716) 672-8493</td>
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<tr>
<td>E-mail: <a href="mailto:wilsonfp@alltel.net">wilsonfp@alltel.net</a></td>
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The University of Nebraska thanks its Corporate Sponsors.

If you, too, would like to become a Corporate Sponsor, call Paul Read at (402) 472-5136 or e-mail: pread@unl.edu.
FALL WORKSHOP REGISTRATION FORM
“Instrumentation for Vineyards and Wineries”
University of Nebraska East Campus Student Union
Saturday, November 6, 2004
8:00 a.m. to 6:00 p.m.

Name__________________________________________ $45.00 _______________

Vineyard/Company__________________________________________ (Includes lunch, wine tasting and parking permit).

Address______________________________________________

City________________________________State____ Zip________

Telephone:_______________________E-mail_________________

Additional people registering:

Name__________________________________________ $45.00 _______________

Name__________________________________________ $45.00 _______________

**Pre-registration Deadline is October 29, 2004 – Registration is $50.00 after October 29, 2004.

Register me for the Wine Appreciation Workshop – Friday night (Separate registration fee required)

“FUNDAMENTALS OF WINE EVALUATION” REGISTRATION FORM
University of Nebraska East Campus Student Union
Friday, November 5, 2004
6:00 p.m. to 9:00 p.m.

Name____________________________________ $25.00

Vineyard/Company___________________________

Name____________________________________ $25.00

Vineyard/Company___________________________

TOTAL AMOUNT ENCLOSED $______________

Make checks payable to: University of Nebraska Viticulture Program

And mail to: Viticulture Program
Attn: Donna Michel
University of Nebraska
377 Plant Science Hall
Lincoln, NE 68583-0724

Questions?
Call Paul Read at 402/472-5136 or Donna Michel at 402/472-8747
pread@unl.edu  dmichel@unl.edu
Instrumentation in the Vineyard and Winery
November 6, 2004
East Campus Union – University of Nebraska, Lincoln, NE
Draft Agenda
(Titles, time and topics subject to change)

8-9:00a  Registration, coffee, rolls

9:00a  Welcome – Great Plains Room

Winery Sessions

9:05a  Dr. Tom Cottrell, S.W.A.T.– Fundamentals of Winery Instrumentation

10:00a  Break

10:30a  Tom Cottrell – Advanced Wine Measurements

12:00  Lunch (and “Door Prize Fun”), Featuring Mac’s Creek Vineyard and Winery this year.

1:00p  Bill Waltman – “Climate, Weather and Instrumentation in the Vineyard” - features some of the latest information on vineyard instrumentation and what it means to the practical grape grower.

1:45  Keri Anderson – University of Nebraska Agronomy & Horticulture Department – “Analyzing Health-related Components of Wine”.

2:15p  Jodi Harper, University of Nebraska BioSystems Engineering Department – Introducing the Electronic Nose

2:30p  Vendor presentations – Services, equipment and Measurement Devices for the Winery and Vineyard

3:00  The “Question Box”. Dr. Cottrell and our experts will discuss questions submitted to the “Question Box.”

3:30 -  NWGGA Informal Meeting

Vineyard Sessions

9:05a  Dr. Kenneth Hubbard – University of Nebraska Director – High Plains Climate Center – Weather Measurement in Nebraska and the High Plains

10:00a  Break

10:30a  Bill Waltman – “Climate, Weather and Instrumentation in the Vineyard” - features some of the latest information on vineyard instrumentation and what it means to the practical grape grower.

11:15a  Marcus Tooze – Imagery in the Vineyard

12:00  Lunch (and “Door Prize Fun”).

1:00p  Soil Moisture Measurement in the Vineyard

1:30p  Soil and tissue tests and their application.

2:00p  Vineyard Basics – Steve Gamet, University of Nebraska Viticulture Program.

2:30p  (return to main session room for vendor presentations and the “Question Box” discussions.)

6:00p  Adjourn

Have a safe trip home!
See you in Kearney
Eighth Nebraska Winery and GrapeGrowers Forum & Trade Show – March 2005!

4:00p  Tasting some of Nebraska’s finest wines. A hearty “Thanks” to all of the participating wineries – this is a great opportunity to discuss the day’s program with friends and colleagues on an informal basis and in a relaxed setting.

SOME MOTELS IN THE AREA:

<table>
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<th>Motel</th>
<th>Address</th>
<th>Zip Code</th>
<th>Phone Number</th>
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<td>Country Inn &amp; Suites</td>
<td>5353 No. 27th St.</td>
<td>68521</td>
<td>(402) 476-5353</td>
<td>$65.00</td>
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<tr>
<td>Baymont Inn</td>
<td>3939 N. 26th</td>
<td>68521</td>
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<td>Super 8</td>
<td>2545 Cornhusker Hwy</td>
<td>68521</td>
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<td>Holiday Inn Express</td>
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<td>Howard Johnson Inn</td>
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October 2, 2004 - Nebraska Wild Fruit and Nut Jam in Nebraska City - A first-ever Nebraska Wild Fruit and Nut Jam will celebrate foods made with Nebraska-grown fruits and nuts. The event is 10 a.m.- 5 p.m. Oct. 2 at the University of Nebraska Kimmel Education and Research Orchard and Vineyard in Nebraska City.


November 5, 2004 – Fundamentals of Wine Evaluation. East Campus Union; 6:00 – 9:00 p.m. Open to the first 50 people to register. $25.00 pre-registration required. Contact Paul Read, pread@unl.edu, or Donna Michel, d michael@unl.edu - REGISTER TODAY!

November 6, 2004 – Fall GrapeGrowers Workshop. East Campus Union. “Instrumentation for Vineyards and Wineries” Contact Donna Michel, d michael@unl.edu or 402/472-8747 for more information. Pre-Registration - $45.

February 5-7, 2005. Midwest Grape & Winery Conference, Tan Tara, MO.


March 21-24, 2005. Wineries Unlimited, Lancaster, PA

Planning Ahead – Future Forums
2005 – March 4 and 5 – Holiday Inn, Kearney, NE
2006 – March 3 and 4 – Holiday Inn, Kearney, NE
2007 – March 2 and 3 – Holiday Inn, Kearney, NE

NOVEMBER WORKSHOP REGISTRATION MATERIALS ENCLOSED!

November 5, 2004 – Fundamentals of Wine Evaluation
East Campus Union – 6:00 – 9:00 pm

November 6, 2004 – 2004 – Fall Workshop
East Campus Union – 8:00 am – 5:30 pm