Activities, Accomplishments, Outcomes and Impact.

The Viticulture and Enology Program Work Team became operational with submission of the formal PWT petition in August 2009. The PWT exists to support profitable production of grapes, wine and grape products in New York State, including:

- Profitable and sustainable production of grapes, wine and juice products
- Relevant input by industry into overall direction of extension programs and activities
- Research efforts that are connected with finding solutions to issues identified by industry.
- Visibility and demonstrated impact to decision-makers and funding agencies
- Connection of extension staff with campus-based faculty and extension programs

The group is diverse, and encompasses 20 Cornell faculty research and extension programs, 5 associated ARS research scientists, and 10 Extension Educators representing four regional grape programs, along with the Northeast New York Fruit Program. Industry input is channeled through program advisory committees for the respective extension programs.

Communication and joint research and outreach projects were major efforts, and the major focus of the group's August 13 meeting, held jointly with the Viticulture/Enology research and extension steering committee. The group worked closely with CALS communications services to develop an improved web presence, launched new extension newsletters and continued to collaborate on existing ones. These include:

- **Veraison to Harvest**: A weekly statewide newsletter reporting on grape ripening conditions across of New York, with collaboration from the Lake Erie, Finger Lakes, Hudson Valley, and Long Island grape programs and the Statewide Enology and Viticulture Extension programs. Distributed to >1000 e-mail addresses across NY. [http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/index.cfm](http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/index.cfm)
• **Cellar Dweller**: Chris Gerling and Anna Katharine Mansfield launched a new bi-weekly newsletter, delivered during the winter months to winemakers statewide, to communicate timely information about winemaking processes and troubleshooting.  
http://grapesandwine.cals.cornell.edu/cals/grapesandwine/outreach/enology/cellar-dweller.cfm

• **Appellation Cornell**: A new quarterly newsletter focusing on 'News from Cornell's Viticulture and Enology Program', with a detailed research article, faculty focus, industry focus, student focus, and news briefs/upcoming events. Articles are written by Cornell faculty and staff, and an editorial board oversees the newsletter. Following extensive preparation work with CALS communication, it was launched in January, 2010.  
http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/index.cfm

• **Web Resources.** Three collaborative projects addressed improving the web presence of research, extension, and teaching programs.
  
o  [http://grapesandwine.cals.cornell.edu/](http://grapesandwine.cals.cornell.edu/) - We worked with CALS communications services to revamp the Cornell Viticulture and Enology Program website, including the integrated Appellation Cornell newsletter.

  o  [http://www.fruit.cornell.edu/](http://www.fruit.cornell.edu/) - Juliet Carroll, IPM fruit coordinator, and Teddy Bucien (program aide) are revamping the Cornell Fruit Resources website, including Tree Fruits, Small Fruits, and grapes. This site serves as a 'gateway' and index to basic information about grape production, including production, IPM, business management, and marketing.

  o  **Vineyard Establishment for New Growers.** Jodi Creasap-Gee of the Lake Erie Regional Grape Program coordinated this step-by-step guide to vineyard establishment, including participation from the Finger Lakes grape program, several members of the Lake Erie team, and the Statewide Viticulture Extension program.

**Bud Cold-Hardiness Information.** Real-time information on the potential for winter injury was gathered from collections of dormant wood in the Lake Erie, Finger Lakes, and Hudson Valley, and seasonal graphs of winter hardiness were posted for a range of four varieties throughout NY. (Jodi Creasap-Gee, Hans Walter-Peterson, Steven Hoying, and Tim Martinson)  
http://grapesandwine.cals.cornell.edu/cals/grapesandwine/outreach/viticulture/weather.cfm

**Viticulture 2010.** Extension educators (Tim Weigle, Jodi Creasap-Gee, Hans Walter-Peterson, Kevin Martin) and the Enology Extension program (Anna Katharine Mansfield and Chris Gerling) joined forces with an industry-led organizing committee and the New York Wine and Grape Foundation to host a statewide conference addressing wine and grape production and business issues. This program takes place every 3rd year, and is held in lieu of the regional winter conferences and NY Wine Industry workshop. Program is posted at:  

**Special focus for programming:** Several special areas of outreach in response to industry conditions were addressed this year:

• **Spring Frost in the Lake Erie Belt.** Late frost in the LE region reduced the crop, and LERGP educators addressed this through field meetings and several newsletter articles.
• **Supply and Demand of Wine Grapes.** Hans Walter-Peterson re-designed and launched the NY Grape and Wine Classified page, and received record listings of grapes for sale. In conjunction with the NY Wine and Grape Foundation, the listing was publicized throughout the Northeast, facilitating matching of potential buyers and sellers of grapes. [http://media.cce.cornell.edu/hosts/grape-classifieds/-10_New_York/](http://media.cce.cornell.edu/hosts/grape-classifieds/-10_New_York/)

• **Emerging North Country Grape Industry.** New Cold climate cultivars have made it possible to grow grapes in the Lake Champlain and Thousand Island areas. Several visits by Cornell research and extension personnel were made to address this industry's emerging needs. Kevin Iungerman's Lake Champlain grape variety trial provided information on variety performance in the region. A regional planning project entitled Research and extension needs for Cold Climate Cultivars drew growers and winemakers from 14 Northeastern and Midwestern states to planning meetings in Vermont and Minnesota. Results detailed at: [http://blogs.cce.cornell.edu/grapes/cold-climate-research-extension-needs/](http://blogs.cce.cornell.edu/grapes/cold-climate-research-extension-needs/)

• **Wine Analysis Shortcourse.** New winemakers need to understand the meaning and measurement of the major chemical parameters throughout the winemaking process. This course taught the fundamental principles and techniques involved in berry samples, preparing and carrying out fermentations, and analyzing made wines. In lecture and laboratory sessions, students learned about pH, titratable acidity, sugar and alcohol and other important considerations.

• **Artisan Distilling Workshop.** Participants learned the fundamental principles of distillation and creating artisan spirits. Demonstration distillations were performed on the still in the Vinification & Brewing Laboratory and also at a local distillery, where vodka was produced. The course taught rudimentary calculations for new producers to estimate the amount of raw materials needed and the approximate processing times required in order to create spirits.

• **Fermentation for Distillation.** Before distilled spirits can be produced, a substrate material must first be processed and fermented. While wineries and cider producers are familiar with the equipment and techniques required to remove stems and/ or seeds and press juice, those who are entirely new to the industry need guidance about how to transform fruits and grains into fermentable liquid.

• **Winery Wastewater-Wastewater handling is an emerging issue for NY wineries. New regulations may come into effect in the near future. A workshop was held to discuss the relevant issues surrounding wastewater in wineries and some possible ways to reduce volume and handle effluent. The workshop also emphasized the importance of measuring water usage, waste, and BOD/ COD levels so that that wineries might have answers to provide for engineers and others who would design solutions.**