

Hobart and William Smith Colleges, Geneva, NY

July 16-18, 2019

Shaulis Symposium at ASEV-ES focuses on Digital Viticulture.

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Geneva, NY. A special vineyard tour and symposium entitled “Digital Viticulture: New Tools for Precision Management” will be featured as part of the annual American Society for Viticulture and Enology- Eastern Section (ASEV-ES) conference at Hobart and William Smith Colleges in Geneva, NY on July 16 through July 18.

The two-day program and vineyard tour will bring together suppliers, researchers, and growers to explore the tools and concepts of precision viticulture. New technologies, such as inexpensive sensors, digital imaging, geographical information systems, and precision machinery are converging to make precision viticulture possible. This field tour and symposium will focus on tools, concepts, and platforms for putting it all together to manage vineyards.



Nelson Shaulis

“Nelson Shaulis and others developed principles of vine physiology that form the basis of modern viticulture over the past 50 years”, said Tim Martinson, Senior extension associate with Cornell University. “Yet growers have lacked the tools to apply these principles on a vine by vine basis until now. New precision ag technologies are finally making it possible to vary management within a vineyard to achieve management goals.”

The ASEV-ES conference, featuring presentations on enology and viticulture from students and researchers of the Eastern Section, will take place on Tuesday, July 16. The conference includes lunch and Wines of the East reception.

The vineyard tour and demonstrations on Wednesday, July 17 will include variable-rate shoot thinning, mechanical crop estimation, yield monitors, sensors for measuring soil and canopy characteristics, UAV and tractor-mounted imaging systems, and tools for canopy management. The tour includes lunch and reception featuring regional wines.

The Shaulis Symposium on July 18 will focus on applying viticultural principles to address within-vineyard variability. Four sessions will cover the three-step process of implementing precision management: Measure, Model, and Manage. The symposium will include lunch and reception.

- **Session 1:** Physiology of vine balance and precision viticulture
- **Session 2:** Metrics for management: Sensors, drones, satellites, and analytical equipment
- **Session 3:** Models for management: Translating data to practical tools for deciding ‘what I need to do and where’.
- **Session 4:** Examples of applied digital viticulture.

Registration options for each day are available. Conference, Vineyard Tour, and Symposium information is available at www.asev-es.org.

DIGITAL VITICULTURE Nelson J. Shaulis Symposium
ASEV AMERICAN SOCIETY FOR ENOLOGY & VITICULTURE Eastern Section

New Tools for Precision Management
July 17-18, 2019 Hobart & William Smith Colleges in Geneva NY
 Held in conjunction with **ASEV-Eastern Section Conference July 16.**
 For more information about the conference and symposium visit www.asev-es.org

Vineyard Tour and Demonstrations July 17

- **View demonstrations** of new sensors, robots, imaging technologies, and map-guided, variable-rate equipment
- **Experience** equipment demos by industry vendors
- **Enjoy Lunch, Reception, and Wine Tastings** from Keuka and Seneca wine trails while networking

Nelson J. Shaulis Symposium July 18

- **Learn from experts** how digital tools are applied to manage variable vineyards, reduce labor, and improve yield and quality
- **See digital tool application** examples from New York, California, and France

NDVI at Bloom
 NDVI at 21 Days after Bloom
 Soil Electrical Conductivity
 Management Classification

Map-based Management Zones

GPS Enabled Tractor

Variable-Rate Thinning

NDVI Sensor

3-D Cluster Imaging

Dr. Nelson Shaulis and others developed principles of vine physiology that form the basis of modern viticulture. Yet growers have lacked the tools to apply these principles on a vine-by-vine basis to manage variable vineyards.

New technologies such as inexpensive sensors, digital imaging, geographical information systems, and precision machinery are converging to make precision viticulture possible. This field tour and symposium will focus on tools, concepts, and platforms for putting it all together for managing vineyards.



July 17 Field Day and Vineyard Tour: Demonstrations of sensors, mapping technology, and variable-rate GIS-ready equipment for vineyard management. Tour includes lunch and wine reception featuring regional wines.

- **Morning:** Clearview Vineyards, Branchport, NY. Focus on spatial crop load measurement, yield monitors, tractor-mounted NDVI sensors, mechanical yield estimation, brix mapping, GPS-enabled tractors
- **Afternoon:** Anthony Road Vineyards, Seneca Lake, NY. Focus on vinifera: Drones, Imaging systems including drones and cluster imaging systems, novel sensors, tools for canopy management.

July 18 Nelson J. Shaulis Symposium: The symposium will focus on applying viticultural principles to address within-vineyard variability using the three-step process: MEASURE, MODEL, and MANAGE. Symposium includes lunch and reception

- **Session 1:** Physiology of vine balance and precision viticulture
- **Session 2:** Metrics for management: Sensors, drones, satellites, and analytical equipment
- **Session 3:** Models for management: Distilling a flood of data to practical tools to guide management decisions
- **Session 4:** Examples of “Digital Viticulture” from around the world.

Conference, Tour, and Symposium information at:

www.asev-es.org