New Year’s greetings everyone! Classes started the 3rd week of January so we are just now getting into the groove with the new semester. Folks have been bundled up to walk between classes since mornings have frequently been in the single digits. Unlike Tidewater, we are still waiting for some significant snowfall! We are welcoming Amber Vallotton, our new Extension faculty member (see below) this month and we have searches underway for a Horticultural Crops Research and Extension Specialist at the Eastern Shore AREC in Painter and a Translational Genomics of Horticultural Crops Research and Teaching Specialist at the Blacksburg campus. I will keep you updated in future editions of our e-newsletter on the progress of those searches. Alumni, please e-mail me (rharris@vt.edu) with an update that you would like to share in our annual newsletter, Seeds. Please visit the Horticulture Department web site often for former Seeds editions and special departmental features. One good way to stay connected with our department is on Facebook https://www.facebook.com/VirginiaTechHorticulture. Please “like” our page to get departmental information and updates. If you have any announcements you would like posted to the Facebook page, please contact Pris Sears (sears@vt.edu) or Sarah Gugercin (sbgugercin@vt.edu). We are resuming our ‘last-Friday-of-the-month’ Horticulture social for 2014 - please check our Facebook page for the current month’s location. All faculty/staff/students/friends are welcomed and encouraged to join us! With kind regards, Roger

The Horticulture Department is very pleased to welcome Amber Vallotton in the new position of Coordinator of the Fresh Produce Food Safety (FPFS) team. Amber will be coordinating the efforts of the FPFS team and other fresh produce food safety efforts across all of Virginia. In this role, she will provide support and training on all aspects of food safety during all phases of fresh produce production and handling - with an immediate emphasis on Good Agricultural Practices (GAP) training for our vegetable and fruit producers. Amber comes to us from the Shenandoah Valley where she has been an Extension Agent with Virginia Cooperative Extension in the Northern District since 2007. Amber started as a Crop and Soil Science agent and was reassigned to horticultural programming serving both commercial and non-commercial audiences in 2010. Amber has worked extensively with the Extension Master Gardener program and the Virginia Beginning Farmer and Rancher Coalition. Welcome Amber!
Recent publications


Velva Groover was December’s CALS staff employee of the month. Velva is a long time research specialist in our department. Many students know Velva as an assistant in our Plant Propagation labs. In addition to working with the research programs of Drs. Day, Harris, and Niemiera, Velva recently began working in the research program of Dr. Megan O’Rourke. Shown in the picture are (L-to-R) Roger Harris (Department Head), Dr. O’Rourke, Velva, and Dean Alan Grant.

Hokies in Spain! As part of the new Wintermester program, Barbara Leshyn and Susan Day traveled with 16 College of Agriculture and Life Science students on an agricultural tour of Spain. Barbara and Susan developed a Spanish class targeted to the different agricultural tours they would be taking. The students came from different majors within our college, Horticulture, Animal Science, Biology, and Agricultural Economics. Over the two weeks of the trip, they visited HIPRA, a preventative vaccine laboratory, a pig farm, a dairy that makes artisan yogurts and employs mentally disabled to help run the farm, various garden centers and nurseries, a tree nursery, a 500 year old farm and working mill that had been in the family for 20 generations, vegetable production research centers, an orange packing plant, a bio dynamic Spanish cava vineyard and winery, a nature preserve that also is home to all the rice paddies of the Valencia area and the group went on a three hour hike through a community-managed cork oak (Quercus suber) forest. The group stayed in base hotels in the cities of Barcelona, Vic and Valencia so after a morning of agricultural visits the students could experience the city life in Spain. Classes were held in hotel lobbies, restaurants, on the bus and anywhere we could stop and discuss the Spanish language. The students were encouraged to ask questions in Spanish while on the tours. As an added extra bonus the students also learned a lot of Catalan phrases as much of the trip occurred in Cataluña. The feedback from the students as ‘the best thing they have ever done in college’ is enough to say that the trip was a success. There are plans already to do this trip again and also branch out into other countries. See trip pictures on the next page.
New grant supports nursery crops research at the Hampton Roads AREC

Modeling soilless substrate to maximize plant available water for containerized nursery crop production - Jeb Fields, James S. Owen, Jr and Julie Brindley

What is the relationship between the substrate and plant in your greenhouse or nursery? How does it impact irrigation scheduling and subsequent crop growth? Researchers and growers have made great strides in using low - tech (i.e. leaching fraction) and high - tech (i.e. substrate moisture sensors) methods to assist in better scheduling irrigation. However, the question still remains; how dry can you go between irrigation events and what is the subsequent impact on crop growth? Dr. Altland (USDA - ARS) dug deeper and asked; "now that we are good at measuring substrate physical properties and moisture content, how do the numbers equate to crop growth?" (paraphrased). Dr. van Iersel at UGA has begun to explore this question of plant water use in relation to substrate moisture; indicating it is not the water measured using static means that is of interest, but instead the ability of water in the substrate to be transient or move to the root as water becomes limited. This ability for water to move is termed hydraulic conductance of the substrate and has been hypothesized by Dr. van Iersel as the key to water availability. Research proposed herein will build on current findings from Dr. van Iersel to better answer the question of how crop growth relates to the hydro-physical properties of soilless substrates utilized to produce containerized crops. This will be accomplished by measuring substrate hydro-physical properties, modeling water flow in variably saturated porous media and evaluating response of containerized crops in a nursery setting using engineered soilless substrates with different physical properties based on model results. (From the press release by the granting agency, The Center for Applied Nursery Research at the University of Georgia)

Art in the Garden is new program featuring the work of local artists on display inside the Peggy Lee Hahn Garden Pavilion. Currently on display in the Peggy Lee Hahn Garden Pavilion through February: "Selections from the Blumenati" by Knic Umstead.

Lunchtime Learning - Free Garden Walks and Talks! Held on various Wednesdays (not every Wed.). All start promptly at 12:00 noon and run from 30 minutes to one hour. Meet at the Peggy Lee Hahn Garden Pavilion. No registration required. Parking passes available at Pavilion for Visitors only, or stop at the Visitor’s Center on Prices Fork to pick up a pass. F/S must park in designated F/S spaces.
Fabulous Plants, Fantastic Combinations with Dr. Holly Scoggins. Feb. 5 12:00-1:00 p.m. Holly brings the color and helps fend off winter with a plant-lust-inducing hour of fun! Her talk will feature unusual and underused tropica ls, annuals, perennials and more.

Pandapas Pond Pollinator Garden-- with Barbara Walker, Volunteer Coordinator at the Eastern Divide Ranger District, US Forest Service February 26 12:00-1:00 p.m. Did you know that there is a native plant, pollinator-friendly garden in our national forest, just minutes away from Pandapas Pond? Barbara will describe the garden, show some of the plants that you’ll see growing there and tell how local volunteers have worked to create this area.

Seminars and Workshops LOTS going on this winter at the Pavilion- so don’t go dormant! We’re featuring fabulous plants, delicious herbs, botanical intrigue, gardening tips and techniques, and more - all to get you inspired for spring! Note space is limited and pre-registration is REQUIRED - print off form (below) and mail it in, or contact Stephanie at vtgarden@vt.edu or call 540.231.5970 to let us know you’re coming.

China – Its Flora, Frustrations and Future Prospects for American Gardens Dr. Richard Olsen of the United States National Arboretum Saturday February 15, 10:00—11:30 a.m. $15 Friends of the Garden/$20 general public Peggy Lee Hahn Garden Pavilion. China, the Mother of Gardens, is the center of diversity for many species of plants cultivated in our gardens. With over 30,000 species, China is both a storehouse and driver of genetic diversity. Modern-day plant hunters and plant breeders tap into this diversity to develop new ornamentals with novel traits and pest and disease resistances. Dr. Olsen will discuss his recent trip to China, the research conducted, the plant species seen, and the implications for American horticulture.

Seed Starting Workshop with Dr. Holly Scoggins, Dept. of Horticulture and Garden Director, HHG Tuesday March 4, 10:00 a.m.—12:00 p.m. $15 Friends of the Garden and Hale YMCA Gardeners/$20 general public - Peggy Lee Hahn Garden Pavilion. Join us for an info-packed seminar on how to get the most out of your vegetable and flower seeds. Holly will cover seed saving and storage, strategies to enhance germination, and care of seedlings. Bonus: take home seeds and other goodies to get started!

Mini Hoophouse Construction at the Hale YMCA Community Garden Jenny Schwanke, Garden Coordinator Tuesday March 4, 1:30-3:30 p.m. $15 Hale YMCA Gardeners and Friends of the Hahn Garden/$20 general public. Come to the Hale YMCA Community Garden to learn how to build a mini hoophouse, perfect for nurturing a few flats of spring seedlings. Take the hoophouse home, or place in your community garden plot. Tools and materials will be provided. Sign up for both Seed Starting and Mini Hoophouse Construction and receive a $5 discount!

Garden Flow with Karen Rexrode, estate gardener at Oak Hill (Leesburg, VA), and horticulturist with Merrifield Garden Center. Saturday March 29, 10:00 a.m.—12:00 p.m. $15 Friends of the Garden/$20 general public. Peggy Lee Hahn Garden Pavilion. Have you ever wondered how a garden can seem to fit around a home, like the perfect piece in a puzzle? When the house and landscape flow together, you feel very comfortable in that space. Questions arise, is it a personal thing? Naturalistic thing? A lack of mastery or someone’s great attention to detail? After years of studying the concept, Karen has come up with some thoughts on the art of garden flow. She ties the movement and visual cues into a lecture that will help you understand what makes a person feel comfortable in your garden.