

# Department of Horticultural Science Newsletter

Summer 2004

North Carolina State University, Raleigh, NC 27695-7609

[http://www.cals.ncsu.edu/hort\\_sci/](http://www.cals.ncsu.edu/hort_sci/)

## News from the Department Head

Julia Kornegay

It is rather quiet in Kilgore Hall these days with most of our students away for the summer. **Spring graduation** for the Horticultural Science Department was a festive and happy occasion. About 200 family and friends joined us at the Ruby McSwain Center for the May 15th Diploma Presentation Ceremony. Andy Bell and Todd Lasseigne successfully completed their Ph.D. degrees; Amy Williams and Melissa Brown (in absentia) finished their M.S. degrees; and 20 undergraduate students (see below) received B.S. degrees. Congratulations to all!! Horticultural Science graduates are a lucky group. Not only are they able to find good jobs (many go on to start their own businesses), but they can look forward to a lifetime of enjoyment of working with plants and an enhanced appreciation for the natural environment.

**B.S. degrees were awarded to:** Bree Ann Allison, Kristen Nicole Cook, Jason Bryan Galloway, Michael Elliott Jones, Wendy Marie Kanable, Seth Aaron Levkoff, Ben Paul Maley, Amy Elizabeth McBryde, Judith Virginia Morgan-Davis, Jennifer Michele Pate, Cara Lee Rose, Nicholas Peter Sagan, Daniel Lee Shires, Sean Michael Simmons, Ashley Jean Smith, Christopher Alan Smith, Jack Carlton Templeton II, Robert Nicholas Waddell, David Garrett West, and Jennifer Lane Yarbrough.

You would also be hard pressed to find many faculty in Kilgore Hall these days. Those who have commodity-based research and extension programs are conducting field trials on research stations and farms across the state. Summer is also the time when many of our faculty attend annual meetings of professional societies and

associations. I recently returned from six days in Dallas where I attended the annual conference of the American Association of Botanical Gardens and Arboreta. For the last two years, I have served as secretary of the AABGA Board of Trustees and on the Executive Committee. A number of our faculty will be giving talks at the American Society of Horticultural Science annual meeting in July. I will be participating on a panel to discuss the status of regional horticultural programs at US universities. We have several examples of successful regional programs in our department.

**Bryce Lane and Stu Warren** are both on six-month sabbatical leave. It began in Italy with the summer international field trip for 12 horticulture students to visit botanical gardens, arboreta, and private estates in Italy. What a great opportunity this is for our students to see and experience horticulture in other parts of the world!

We have a number of horticulture field days and other events across the state this summer:

- Strawberry Field Day, Clayton (May 5)
- Landscape Field Day, Arboretum & Hort. Field Lab (May 19)
- Nursery Short Course, JC Raulston Arboretum (June 15-16)
- Cucumber field trial visit, Clinton (June 24)
- Specialty Crops, Kinston (July 13)
- Landscape Color Field Day at the Arboretum (July 21)
- Apple and Specialty Crops, Fletcher (July 22)
- Fresh Market Tomato Field Day, Fletcher (August 5)
- Ornamentals Twilight Field Day, Hort. Field Lab (Sept. 17)
- Sweetpotato Field Day (October)

Amidst all these events, many of our faculty and staff will take a few days of vacation with families and friends. I'm looking forward to a week at the beach! Best wishes to all for a safe and relaxing summer vacation.

**Amy Williams** won the departmental logo contest with a logo featuring a brick shape and flowery letters.

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## Departmental Highlight

Todd Wehner

The **tomato breeding program** run by Randy Gardner helps growers sustain and increase production and profitability through improved cultivars. Consumers benefit from improvements in fruit quality and diversity in types of fresh-market tomatoes. Disease resistance genes incorporated into cultivated types from wild germplasm will benefit tomato production and cultivar development worldwide. For tomato breeding, see: <http://www.ces.ncsu.edu/fletcher/programs/tomato/>



For Randy Gardner, see:  
<http://www.ces.ncsu.edu/fletcher/staff/rgardner/>

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## Interesting Web Sites

Mary Peet

**Fertilizer Mixing Calculator** by Brian A. Krug, Brian E. Whipker, and Mary Peet. FERTCALC, a Microsoft Excel-based program (launched summer 2003) is a companion to PGRCALC. It was designed to assist growers in calculating fertilizer mixtures with precision and ease; see:  
<http://www.ces.ncsu.edu/depts/hort/floriculture/software/FERTCALC.htm>



**Plant breeding** is a web site maintained by Todd Wehner for information on the interdepartmental plant breeding program at NC State. It has been revised and given a newer appearance recently with help from Chris Glenn; see:  
<http://cuke.hort.ncsu.edu/breeding/>

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## People in the News

Todd Wehner

The departmental web page dealing with **HS People in the News** is updated periodically, and is available for you to browse at:  
[http://www.cals.ncsu.edu/hort\\_sci/news/hspplnews04.html](http://www.cals.ncsu.edu/hort_sci/news/hspplnews04.html).

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## Alumni News

Todd Wehner

**Sergio Carballo** (MS, 1993) returned to NCSU for a short visit April 5. Sergio got his degree under the direction of Sylvia Blankenship, with Doug Sanders providing assistance. He was amazed at the changes, with new greenhouses, Centennial Campus, the additional 100,000 people in Raleigh, and other things. Sergio is employed at INIA in Montevideo, Uruguay as a postharvest researcher and owns a fresh cut salad company that services the Montevideo area. He was in the US to attend the First World Congress on Organic Food at Michigan State University, where he gave a presentation on Organic Food Safety Issues and Attitudes in Latin America. While at NCSU, Sergio visited with Doug Sanders and Dennis Osborne about their food safety education program and possible cooperation, and talked with Sylvia Blankenship, CALS and Maria Correa, Vet

Med, about postharvest and food safety interests and possible cooperation between NCSU and INIA. He was able to visit old professors like Mason Pharr and Jim Ballington. Sergio is one of 4 INIA researchers to get a MS from our department.

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### Faculty News

David Monks

**Nancy Creamer** received a Kellogg grant for improved hog production in North Carolina.

**Dick Bir** is now emeritus faculty member; his position will be advertised at the assistant professor level.

**Wayne Buhler** was promoted to Associate Professor with tenure.

**Will Hooker's** HS 400 studio completed a sculpture titled, "Seussian Dew Drops" that was the stage decoration for the Park Class of 2004 symposium on creativity, put on March 25th in Stewart Theater. The sculpture then moved to the front of Kilgore Hall for a couple of weeks, and now resides at the JCR Arboretum, where it will be on display for the next month. Also, Will Hooker is building "The Trail of Zephyros", an ephemeral bamboo sculpture at the NC Museum of Art (in the field behind the old youth prison) that serves as a path leading to the new exhibit, "The Cloud Chamber." The sculpture was started for this year's SE Ecological Restoration Annual Conference held at the NC Museum of Art on March 25-27. It consists of 160 bamboo poles that flow sinuously both horizontally and vertically, to emulate the movement of the wind through a reconstructed Piedmont Prairie.

**Will Hooker's** TV course, "Introduction to Permaculture", shown on the CRC education channel this past spring, proved to be so popular that it will be shown again this summer on M, T, W and Th nights from 10:00 - 11:30 on cable channel 18. Also, Will Hooker is an ex-officio member of the Dorothea Dix Hospital Property

Study Commission to obtain a master plan for the remaining Dix property, after which some of the land will be sold or preserved as Raleigh's version of Central Park.

**Julia Kornegay** was a guest lecturer (see photo) in **Doug Sanders'** postharvest physiology class in spring semester on the topic of the business of importing flowers.



**Mary Peet** traveled to the Guangzhou Agricultural Institute in Guangzhou, Guangdong province, China (formerly known as Canton) to present a series of lectures on organic production techniques in the greenhouse and field. Guangzhou is in the southeastern part of China, near Hong Kong and has a tropical climate (no frost). This is a very industrialized part of China, and the beginning of the rainy season, but Chinese hospitality is legendary, and scientists are very interested in sustainable and organic techniques.

In June, **Mary Peet** traveled to Kuala Lumpur, Malaysia, to deliver the keynote paper in Plant Physiology at an ISHS Symposium on 'Greenhouses, Environmental Controls and In-house Mechanization for Crop Productions in the Tropics and Sub-Tropics' held in the Cameron Highlands, Pahang, Malaysia.

In July, **Todd Wehner** will travel to Poland to give a presentation on chilling resistance in cucumber, and tour the Research Institute of Vegetable Crops in Skierniewicz. Following that, he will attend the EUCARPIA cucurbit conference in Olomouc, Czech Republic to present two papers.

**Bryce Lane and Stu Warren** are on study leave June 1 to December 1.

### **Faculty awards**

**Stu Warren** received the Alumni Distinguished Undergraduate professor to honor his teaching work at NC State.

**Dennis Werner** was awarded the Outstanding Teacher for 2003-2004 at NCSU. As a result of being identified by students, alumni and colleagues as an excellent teacher, he has become a member of the Academy of Outstanding Teachers.

**Bob Lyons** received the Faculty and Student Organization Resource Development award in the college of agriculture and life sciences.

**Paul Nelson** received the H Marc Cathey Award from the American Horticultural Society at their awards banquet in Washington, D.C. The award recognizes research achievements in U.S. research institutions and Land Grant universities that solve fundamental horticultural problems in gardening and landscape restoration.

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### **Staff News**

Barb Amos

We say goodbye to **Anne Calta** who went with her partner, Patrick Pitzer, to Appalachian State. Anne has a position at a regional garden center there.

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### **Undergraduate Program**

Bryce Lane

**Graduation** was May 15 at the JC Raulston Arboretum. There were 2 PhD, 2 MS, and 19 BS degrees awarded.

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### **Graduate Program**

John Dole and Rachel McLaughlin

In the **spring semester**, we have 22 MS, 19 PhD, and 6 MHS students in Horticultural Science.

The Graduate students will be taking an outing to a **Durham Bulls game** on July 21 courtesy of Georgina Werner. Any graduate students interested in attending should let Rachel know.

**Beth Larrea** received a \$10,000 grant from Sustainable Agriculture Research and Education Program, Southern Region for: optimizing substrates, composts and fertilizer additions for organic transplant production.

### **Graduate students graduating**

**Melissa Pline, Andy Bell, and Todd Lasseigne** received their degrees this spring.

### **Graduate student awards**

**Pi Alpha Xi** was chosen as the winner of the College's Faculty and Student Organization Resource Development Award, sponsored by the North Carolina Agricultural Foundation. This award is in recognition of our fundraising and support of the college. I will be attending a luncheon on April 14th at the University Club to receive a plaque and \$500.00 will be deposited into our account. How exciting! Special thanks to Dr. Frank Blazich for the nomination, this year's president Peter Conden, and Denise McKinney for providing the necessary information to the award committee.

NC Beautiful has named **James S. Owen** as a 2004 recipient of The Governor and Mrs. Dan K. Moore Fellowship To Keep North Carolina Clean & Beautiful, equally funded by NC Beautiful and North Carolina State University. He is one of only 19 recipients designated since 1995. Congratulations Jim!

**Richard Olsen** won the 2003 Phenomenal Teaching Assistant award. **Carrie Judge** won the 2003 Outstanding Teaching Assistant award.

**Brian Krug** was awarded the Harold F. Wilkins International Foreign Study scholarship. He was the only person selected for program, and will spend 3 months this fall in The Netherlands conducting initial PhD research on plug production.

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### Graduate Student Feature

Richard Olsen

The annual changing of the guard has occurred in the graduate student organizations, resulting in a mix of the new and old faces in leadership positions for the 2004-2005 academic year. New officers in the **Horticultural Science Graduate Student Association** are: Jessica Gaus, President; Leslie Titchner, VP/Social Chair (complain to her if you don't like the doughnut selections!); Trevor Chlanda, Secretary / Treasurer; Michelle McGinnis, GSA Representative; and Monica Santa Maria, International Student Representative.

In the horticultural science honors fraternity, **Pi Alpha Xi**, the new officers are: Richard Olsen, President; Beth Larrea and Ryan Contreras, Vice Presidents; Aliya Donnell, Secretary; Roland Leatherwood, Treasurer (good experience for learning how to manage a \$70,000 budget!); and Melisa Crane and Daniel Jon, Marshals (it takes two people to keep us fed!). As you can see, the burden of leadership is spread among our many capable graduate students, with all chipping in at some point in their careers to make the graduate experience here a memorable one. Good luck to the new administrations!

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### News from Around North Carolina **Horticultural Crops Research Station (Castle Hayne)**

Susan Rooks

The **highbush blueberry** season was a little late but fruit ripened fast in the late spring heat. We are currently harvesting **rabbiteye blueberries**

and will finish harvesting them early this year. Growers are having a good year, almost as good as last year, which was a record.

We had a visitor from Chile, **Enrique Acevedo**, the Production Manager of Vital Berry Marketing, the largest exporter from Chile. He was very impressed with our breeding lines; we are considering them for cultivar release.

### **JC Raulston Arboretum (Raleigh)**

Bob Lyons

The extensive Perennial Border at the JC Raulston Arboretum is the recent recipient of an Award of Merit for Landscape Design from the Perennial Plant Association of America. This prestigious award is given to noteworthy examples of perennial plant use after a panel of judges reviews the design attributes that are based on design logic, visual impressions, plant list, bloom succession, and other features which contribute to the overall value and merits of the perennial garden.



The perennial border was totally renovated and replanted in fall of 1999 following a new design by Edith Eddleman and Doug Ruhren. As usual, the renovation was accomplished with the

great help of JCRA staff, volunteers, students, and the industry.....we are all grateful and invite you to witness the evolution of the Border throughout 2004!

**LCPTRS-Cunningham Research Station (Kinston)**

Bill Jester

There will be a **specialty crops field day** on July 13 to show off the research at Kinston on crops such as Sprite melons and raspberries.

**Mountain Horticultural Crops Research and Extension Center (Fletcher)**

Tom Ranney

Activities in Fletcher are in full summer swing. Levels of productivity, accomplishment, and morale are at an all time high! The mountain stewartia (*Stewartia ovata* var. *grandiflora*) is in full bloom (see photo).



**Small Fruit Program (Morganton)**

Andy Allen

**Andy Allen**, Extension Associate in Viticulture, will be leaving the department in mid-June for a new position as Viticulture Advisor at S.W. Missouri State University. He's excited about the new position, the opportunity to work with a team of viticulture researchers, and being closer to home and extended family. We are appreciative of the extension program Andy developed for NC grape growers and we wish him well in his new position.

**Vernon James Research and Extension Center (Plymouth)**

Mark Clough

In March, **Mark Clough and Craig Yencho** began planting potato trials and finished up in early April. This year we have eleven variety trials planted; three are with growers, one is at the Cunningham Station and the remaining seven are here at the Tidewater Station. In addition to this we put in a trial focusing on spacing at the Cunningham station, and nine other trials with breeding materials at Tide Water.

In May Julia Kornegay, Tom Monaco, Jonathan Schultheis, Craig Yencho, and Mark Clough attended the **NC Potato Association Meeting and Potato tour** in Elizabeth City. Mark Clough and Craig Yencho had a small demonstration plot on the tour to present some up and coming varieties. Also in May Mark Clough set up a poster at the Potato Festival in Elizabeth City to show off the potato breeding program to the public.

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**Wish List**

Julia Kornegay

Because of on-going budget restrictions, the horticulture department can no longer purchase all the items needed by our programs. We hope that our alumni and collaborators will review this list and **help us obtain these items**.

For **Kilgore Hall**

- stove and extraction hood
- digital camera (4-5 Mpixels)

For the **greenhouses**

- two golf carts with back utility beds
- wireless network hubs (802.11b or g)

For the **graduate student office**

- double sided printer
- poster printer (HP 1055CM)
- flatbed scanner
- six replacement computers (Win, Mac)
- computer desks and chairs (8 - 10)

## Horticulture Facilities

David Monks

The USTL greenhouses are in full use, and the **courtyard** separating Kilgore from the USTL greenhouses is nearly finished.



Here are current (May and June 2004) views of the courtyard.



### Departmental Newsletter Committee

- Editor: **Todd Wehner**

- Assistant: **Rachel McLaughlin**

Send items for the newsletter to Todd Wehner  
([todd\\_wehner@ncsu.edu](mailto:todd_wehner@ncsu.edu))