



University of Nebraska-Lincoln

Department of Agronomy & Horticulture

Newsletter



June 20, 2013

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Calendar of Events

June 20: SAC Meeting, 9 a.m., 279M PLSH.

June 20: Biotechnology/Life Sciences Seminar—Practical and theoretical consideration in assembling genomes, James Schnable, Donald Danforth Plant Science Center, 4–5 p.m., N172 Beadle Center.

June 21: 2013 Fit @ Work Challenge, 11:30 a.m.–2 p.m. For more information contact Kimberly Barrett at 2-9480 or the department Wellness Ambassadors [Valerie Swartz](#) or [Pierce Hansen](#).

June 21–July 19: 5K Fridays, 7–7:40 a.m. every Friday at City Campus Recreation, except July 5. Meet your walking/jogging/running goals this summer with the 8-weeks to a 5k group training program. Register at the City Campus Recreation front desk or at <https://shopcrec.unl.edu>.

Green roof construction completed in Keim courtyard



Dr. Richard Sutton inspects his work while constructing the green roof on the new outdoor cabinet in Keim Courtyard this spring.

Planting rooftops (i.e., roof greening) continues to burgeon, but establishment is still expensive and relatively inefficient according to Dr. Richard Sutton, Professor of Ornamental Horticulture, Landscape Ecology, and Design.

For the green roof in Keim Courtyard, Richard used the same technique used on the Larson building in downtown Lincoln. He planted mostly native grasses—collecting native species from the Sandhills and the Panhandle—and Sedum. Stonecrop (*Sedum* spp.) species are the most commonly used plants on green roofs.

Richard partnered with Kim Todd, Associate Professor and Extension Horticulture Specialist, on this project and Kim was able to get funding for the outdoor cabinet, while Richard received funding for the green roof.

The outdoor cabinet has 2 x 6 construction with 16 inches on center—making for a very stout cabinet—in order to withstand the roughly two tons of weight on the roof.

Teco-Edg, a really dense, recycled material made especially for green roofs, was used to hold the green roof in place and is much less expensive than aluminum edging.

Continued on page 2.

Calendar of Events

June 25–27: 2013 NAIPSC Field Course, University of Nebraska–Lincoln West Central Research & Extension Center, North Platte, Neb. See <http://ipscourse.unl.edu/>.

June 27: Winter Wheat Variety Test Plot Tour, seven miles west and one mile south of Wilbur, Neb. Call 402-821-2151 or go to http://cropwatch.unl.edu/c/document_library/get_file?uuid=dd561b50-d4c7-4069-a134-88e051e8a3da&groupId=1841&.pdf for more information.

July 4: Independence Day, UNL closed.

July 15: Second 5-week Session of summer classes begins.

July 22–25: 2013 ASHS (American Society for Horticultural Science) Annual Conference, JW Marriott Resort & Spa, Palm Desert, Calif.

July 24: Turfgrass Research Field Day, John Seaton Anderson Turf Research Center near Mead, Neb.

Aug. 6: Herbicide-Resistant Weed Management Field Day, 9 a.m.–1:30 p.m., David City. Register online at <http://agronomy.unl.edu/weedresistmgt>.

Aug. 7: Herbicide-Resistant Weed Management Field Day, 9 a.m.–1:30 p.m., Fremont. Register online at <http://agronomy.unl.edu/weedresistmgt>.

Aug. 1–10: Lancaster County Super Fair, Lancaster Event Center, Lincoln.

Aug. 16: Summer Graduate Commencement and Doctoral Hooding Ceremony.

Aug. 17: Summer Undergraduate Commencement.

Aug. 26: Fall semester classes begin.

Aug. 21: Flame Weeding Workshop, 9:30 a.m.–5 p.m., UNL Haskell Ag Lab, Concord, Neb. Lunch provided. Register by contacting Wendy Winstead, at 402-584-3837 or wwinstead2@unl.edu.

Green roof construction completed continued from page 1.

As a sustainable green infrastructure, planted roofs require quick coverage of low-growing plants to provide substrate stability and limit wind scour. Plants on green roofs must also withstand extreme temperature, drought, and wind.

A group of regional cooperators and Richard have reported that native prairie grasses and forbs could adequately meet the functional needs of many extensive and semi-intensive green roofs. However, native grass species could be adapted to their harsh conditions.

Work on four green roofs over six years found that mechanical planting with a simple, lightweight hand-seeder using coated seeds produced wider spaced plants, and increased seed production and thus improved infill for the second year.

“So far the green roof in Keim Courtyard is coming along nicely and all the rain we’ve received has helped,” said Richard. “Kim and I are now thinking about adding a rain barrel to catch the run-off and reuse.”

To learn more about green roof research go to <http://agronomy.unl.edu/greenroofs>.

New department Wellness Ambassadors announced



New Department of Agronomy & Horticulture Wellness Ambassadors Valerie Swartz and Pierce Hansen.

Two new Wellness Ambassadors for the Department of Agronomy & Horticulture were announced last month—Valerie Swartz, a Financial Associate in the HAPPI Business Center, 250 Keim Hall; and Pierce Hansen, an Extension Assistant Pesticide Safety Educator, 377E Plant Sciences Hall.

The UNL Wellness program is designed to incorporate physical, social, environmental, occupational, spiritual, intellectual, and emotional wellness. Valerie and Pierce said

they are excited about trying some fresh ideas with the wellness program to include aspects of the UNL Wellness model.

Pierce likes to incorporate wellness into his daily life by biking and running on the Lincoln trail system, hiking, swimming, and eating healthy. He also enjoys learning and practicing guitar, getting together with friends, and traveling. At work, he tries to bike or walk to work, recycle as much as possible, and have his office setup ergonomically.

Valerie incorporates wellness into her daily life with exercise, including Cross-Fit, and biking and jogging in and around Lincoln. She maintains a healthy diet by attempting to grow as much as she can in her personal garden. She also enjoys spending time with her dogs at the dog park or driving around in a bright yellow jeep. Time with family and friends is very important to her as well.

They have put together a very short survey they would like faculty and staff to complete. The survey should help them determine what is important to everyone in a wellness program. The survey link can be found at <http://www.surveymonkey.com/s/P72BVWD>.

New additions made to BYF garden

New garden and nature elements have been added to the Backyard Farmer garden by Keim Hall recently according to Nebraska Master Gardener Director Terri James. Additions include new containers to hold new BYF garden signs, a mail box to hold information, three raised beds, and a trellis to mark the entrance. A bee structure for multiple types of solitary bees (see photo at right) built by Tom Weissling and Doug Golick of the Department of Entomology, along with bee information, is in process. Feel free to walk through the garden anytime and see what’s new.



Photo by Marlene Basse

Aug. 23–Sept. 2: 2013 Nebraska State Fair, Grand Island, Neb.

Aug. 28: UNL Extension Program – Late Season Crop Management Diagnostic Clinic, August N. Christenson Research and Education Building, Agricultural Research & Development Center, Mead, Neb.

Sept. 2: Labor Day, UNL closed.

Oct. 21–22: Fall semester break. No classes, UNL offices open.

Nov. 3–6: ASA-CSSA-SSSA Annual Meetings, Tampa Convention Center and the Marriott Tampa Waterside Hotel, Tampa, Fla.

Nov. 28–Dec. 1: Thanksgiving vacation, UNL closed.

Congratulations

Dr. Tom Hoegemeyer, Department of Agronomy & Horticulture Professor of Practice, received the North American Colleges and Teachers of Agriculture (NACTA) Teaching Award of Merit this year. Good job Tom!

At the Undergraduate Research Fair in April, Agronomy & Horticulture Junior undergraduate student **Allison Siekman**, mentored by **Dr. Mark Lagrimini**, received a \$250 gift certificate to the University Bookstore for her outstanding poster presentation. Twenty-five students from seven different departments in CASNR participated in the fair. Congrats to Allison and Mark!

The **Agronomy Club** was recognized recently as the Outstanding Student Organization at the 2013 CASNR Week Banquet. Excellent job!

Backyard Farmer was recently awarded the 2013 The People's Telly Award Bronze for the 'Turf 101' episode produced by Brad Mills of UNL EdMedia. The Telly Award honors outstanding local, regional, and cable television commercials and programs, as well as the finest video and film productions, and work created for the web. Congratulations!

Research team conducts greenhouse strawberry study



The Nebraska Strawberry Team, back row (left to right): Associate Professor Stacy Adams, greenhouse expert; Ryan Pekarek, owner of Pekarek's Produce; Dr. Vicki Schlegel, nutraceuticals expert; Dr. Paul Read, fruit scientist; Associate Professor Dave Lambe, project MBA. Front row (left to right): Dr. George Meyer, biological systems engineer; Dr. Ellen Paparozzi, principle investigator and team leader; Katie Pekarek, Pekarek's Produce; Dr. Erin Blankenship, statistician; and Liz Conley, research technologist.

Strawberries rank fifth as the most popular consumed fresh fruit product in the U.S., which produces 27 percent of the world supply. California and Florida currently account for 98 percent of the nation's strawberry production.

A team of researchers at UNL, the Nebraska Strawberry Team, could change those percentages someday as they work to develop low cost, sustainable methods for growers to produce strawberries in a winter greenhouse.

The team is led by Dr. Ellen Paparozzi, Professor of Horticulture and includes Stacy Adams, Associate Professor of Practice in Horticulture; Dr. Erin Blankenship, Professor of Statistics; Liz Conley, research technologist; David Lambe, Associate Professor of Practice in Horticulture; Dr. George Meyer, Professor of Biological Systems Engineering; Ryan Pekarek, Owner of Pekarek's Produce and President of the Nebraska Fruit and Vegetable Growers Association; Katie Pekarek, Pekarek's Produce; Dr. Paul Read, Professor of Horticulture; and Dr. Vicki Schlegel, Associate Professor of Food Science & Technology.

Funded in part by the Nebraska Department of Agriculture Horticulture Specialty Block Grant Program the last four years, the

Nebraska Strawberry Team has conducted studies to someday offer an alternative crop for farmers and produce growers.

To make this feasible, the team has created a low-cost double polyethylene house—heated high tunnel—that employs both water and heat saving strategies.

“The benching system is simple and easy to construct and the irrigation is a capillary mat through which fertilizer can be automatically administered” said Paparozzi. “We have trialed 13 varieties and selected four that produce the highest yield per plant.”

“We have trialed 13 varieties and selected four that produce the highest yield per plant.” – Ellen Paparozzi

Recently the team applied for and was granted one year of funding from the National Strawberry Sustainability Initiative that would allow this system to be installed and operated by a Nebraska grower in order to get a real time comparison to the UNL research.

University of Arkansas System Division of Agriculture's Center for Agricultural and Rural

Continued on page 4.

In the news

Dr. Jim Specht was recently quoted in an article about getting better soybeans yields, in the Summer 2013 issue of *The Furrow*.

Some farmers are enthusiastic about burning and rolling soybeans to stress the plant in order to maximize their performance. But researchers are having a hard time proving a benefit to doing so.

"We think there are safer ways—like planting soybeans early—to shorten internodes and increase pod count," said Specht. "Timely planting, along with a package of good management practices, can help get yields to 80 bushels per acre—a lofty goal for most producers."

See http://www.deere.com/en_US/docs/html/brochures/publication.html?id=769ed368#4.

Dr. Sally Mackenzie, plant science, was interviewed about her genetic plant research on May 24 on NPR's Science Friday show about reinventing farming for a changing climate. Go to <http://go.unl.edu/6pi>.

Libraries asking for new journal suggestions

Leslie Delserone Assistant Professor, University Libraries, is asking faculty, staff, and graduate students for suggestions for new journal titles, or database additions, for Agronomy and Horticulture this year. There's no guarantee that all requests will be funded by the Libraries, but she is hoping for up to five each.

She has some ideas based on Interlibrary Loan data, but according to Leslie, hearing directly from the researchers and instructors is more valuable. Faculty, staff, and graduate students can email Leslie directly by June 25 with suggestions at ldelserone2@unl.edu.

Greenhouse strawberry study continued from page 3.

Sustainability (CARS) announced last month that projects from several states—including the University of Nebraska–Lincoln's "Winter Production of Nebraska Strawberries: An Idea Whose Time Has Come"—and \$2.64 million in grants, will add up to more strawberries for U.S. consumers.

The grant awards are part of a \$3 million donation made in February by the Walmart Foundation to the Division of Agriculture. The competitive grants program, administered by CARS, attracted 56 proposals from agricultural research and extension personnel at land-grant public universities in 29 states.

As part of the National Strawberry Sustainability Initiative grant, recipients will have 12 months to complete their projects. CARS will release the project reports in September 2014.

For more information please visit <http://agronomy.unl.edu/cea> and <http://strawberry.uark.edu/>.

Congratulations to the Strawberry Team.



Test strawberry plants growing in an east campus greenhouse.

This project is funded by a grant from the Walmart Foundation and administered by the University of Arkansas System Division Of Agriculture Center for Agricultural and Rural Sustainability.

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Turfgrass Research Field Day set for July 24

The 2013 Turfgrass Research Field Day will take place July 24 at the John Seaton Anderson Turf Research Center near Mead, Neb.

Morning tours will cover graduate student, staff and faculty research projects. A gourmet hotdog lunch will be served followed by afternoon research tours which will include

a turfgrass ID walking tour, a weed/turf management tour, and a Buffalo grass update.

A tradeshow and equipment demonstrations will be offered in the morning and afternoon.

Go to <http://www.nebraskaturfgrass.com/wp-content/NE-Turf-Association-attendees-c.pdf> for more details and a registration form.

Long-time department research technologist passes

The department would like to extend our deepest sympathies to the family of Douglas E. Schrader, 63, of Eagle, who passed away on May 28, 2013.

Doug was born April 11, 1950 in Benkelman, Neb. to Alvin and Betty (Hardwick) Schrader. He graduated from the University of Nebraska-Lincoln in 1972 with a bachelor's degree in agronomy and was a student-worker for UNL in the greenhouses for one year.

He went back to Benkelman to help run the family farm for 13 years and was a distributor for Konklin Products for 15 years. While in Benkelman, Doug was a 4-H leader, Lion's Club member and active in his church.

He returned to Lincoln and UNL as an agronomy technologist in 2001 until his death.

Doug was a member of Capitol City Christian Church where he loved to worship. He spent 18 years of his life dedicated to youth ministry. He was an avid Husker fan and also loved to golf, hunt, fish, read and travel around the world with his wife Joy.

Doug's family members include his wife, Joy; sister, Julie (Steve) Stroup; uncle, Bill Hardwick; aunt, Eleanor Hardwick; many nieces, nephews and cousins.

He was preceded in death by his parents and infant son, Andrew Douglas.

Department photo contest winners on display

The photo contest winners' images have been printed, framed and hung for display in 279 Plant Sciences Hall, just outside the 279M conference room. Stop by and admire the artwork by Laura Stevens, Nes Comez-Vance, Patricio Grassini and Fran Benne.

National Bike Challenge started

A second year of the National Bike Challenge is under way. This friendly competition is hosted by the web site Endomondo <http://www.endomondo.com> and allows bicycle riders to form teams or enter individually to compete for points. An East Campus team has been formed called UNLEastCampus.

The challenge this year officially started at the beginning of May and it continues through September. It is easy to join by going to the Endomondo web site and clicking "JOIN" or login with a Facebook account. Then select what team to join—UNLEastCampus.

This challenge accumulates data on the number of people who like to ride a bicycle and how many miles they ride during a given period of time. Last year, Lincoln was third in the nation for number of points earned. This information, along with the number of miles logged by UNL teams, helped UNL achieve Bicycle Friendly University status at the Silver level. This data can also help make the case for improving cycling infrastructure when official planners are thinking about local or state improvements in transportation.

The FAQ section on the Endomondo site will answer many questions or contact Martha Rowe at mrowe1@unl.edu or call 2-1487.

News from the HAPPI Business Center

Changes to Conflict of Interest policy

There have been changes to the Conflict of Interest policy regarding rental of farmers' land. A new form must be used every time someone rents, leases, or goes into any contract involving land on behalf of the university. This form is available at the HAPPI Business Center in 202 Keim or on the department drive under FORMS/FORM for CONFLICT OF INTEREST STATEMENT.PDF.

The Conflict of Interest form must be filled out by the land owner that the

university is renting land from prior to using the land.

If the land owner is an employee of the university or there is a conflict of interest, the Board Of Regents procedures will be followed. This requires a waiver from the Vice Chancellor for Business and Finance in order to make the contract valid.

If you have any questions about the new changes, talk to someone in the HAPPI Business Center or contact Ben Lennander at 2-6238 or email blennander2@unl.edu.

New policy caps vacation leave maximum

Starting in July, UNL employees will not be able to earn more than 280 hours of accrued vacation leave.

While the vacation leave cap has been in place since 2007, employees have been allowed to earn a full month's accrual—a maximum of 16 hours—if vacation leave balances are below the 280-hour maximum. This allowed employees near the vacation leave cap to achieve balances greater than the 280 hours allowed by university policy.

Starting in July, employees will only be allowed to earn vacation leave up to the 280-hour cap. For example, an employee with a leave balance of 278 hours will only earn two

additional hours of vacation for the month.

Employees with vacation leave balances in excess of 264 hours will receive a reminder email at the beginning of each month. Employees will have until the end of the month to use leave time to lower the vacation balance and receive the full month's vacation accrual.

No existing vacation leave balances will be reduced. The change only affects the ability to earn additional vacation leave.

For more information, log in to Firefly at <https://firefly.nebraska.edu> or contact Human Resources at hroffice@unl.edu or 2-3101.

Department emeriti passes at the age of 88

The department would like to extend our condolences to the family of William M. Ross Ph.D., Agronomy & Horticulture Emeriti faculty member, who passed away June 5, 2013 at the age of 88.

William was born in Farmington, Ill. on March 20, 1925, and died at home in Lincoln at the age of 88. William was the son of Raymond and Bernice (McMahon) Ross. He was co-valedictorian of the Farmington High School class of 1943. During WWII he served in the U.S. Army in Germany and France. Following the war he attended the University of Illinois, where he earned his Ph.D. in Agronomy. He started working at the Fort

Hays, Kan. Experiment Station in 1951 with the U.S. Department of Agriculture. In 1969 he transferred to the University of Nebraska–Lincoln where he continued his work as a geneticist and Professor of Agronomy.

He is survived by his wife of 61 years, Joyce R.(Yost) Ross; four daughters, Karen Standley of Lincoln; Gloria (Dan) Sterud of Maple Grove, Minn.; Sandra (James) Anderson of Melbourne, Fla.; Kathryn Ross of Oak Park, Calif.; and one son, William (Lisa) Ross of Eagle, Neb. and many grandchildren and great-grandchildren. He was preceded in death by his parents, and one granddaughter, Melissa Case.

Start using new parking permits July 1

Parking permits for faculty and staff are available for the new fiscal year, which begins July 1. The permits can be ordered online at <http://go.unl.edu/4j8> or over the counter at 625 Stadium Drive, Suite A.

Orders for annual permits must be completed soon to ensure delivery to campus offices prior to the July 1 deadline. Information needed to complete an order includes My.UNL username and password and current vehicle details – license plate, state, color, make, model and year.

Online pre-orders for nine-month or semester permits will be mailed to campus addresses in August.

SAC Suggestion Box



Have an idea, comment, or suggestion for the department? Let us know using the online form

at <http://agronomy.unl.edu/facultystaff>. Note: IP address is not logged, so all comments will be anonymous. The department ombudsman, Aaron Franco, will direct the comments to the appropriate individual or group.

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Contact: Please send news, information, announcements, and photos to Fran Benne at fbenne2@unl.edu or call 2-8747.

Kreuser selected as Turfgrass Extension Specialist



Bill Kreuser

The department would like to announce that Bill Kreuser will be joining the Department of Agronomy & Horticulture in January 2014, as the Turfgrass Extension Specialist, essentially replacing Roch Gaussoin who is now head of the department.

Bill is originally from Wisconsin and completed his bachelors and masters degrees at University of Wisconsin–Madison and also worked as their research manager.

In addition to Bill's M.S. research on refining growth regulator application schedules, he was involved with a number

of fertilization and management projects while at UW-Madison.

In 2010, Bill started his Ph.D. work at Cornell University examining physiological responses of creeping bentgrass to a novel horticultural oil (Civitas). At the same time he also worked part-time at the Robert Trent Jones Golf Course at Cornell as their spray technician.

Bill's unique combination of practical experience, background in soils and turfgrass physiology, work ethic, research talent, communication skills, and intellect, separated him from a deep field of 15 plus candidates for the position.

Even though Bill officially starts on Jan. 6, 2014—just in time for the Nebraska Turf Conference—there will be an opportunity to meet him at Field Day on July 24 at the Turf Research Center near Mead, Neb..

News for and about graduate students

UNL team wins spot in international competition



A team of University of Nebraska–Lincoln students will take its idea for helping solve global food insecurity to an international competition in Germany this fall. At stake is a \$10,000 grant.

The UNL team has already received \$1,000 of seed money, thanks to being one of five finalists chosen from more than 100 competitors from around the world. The goal is to come up with solutions to the globe's food insecurity problem, said Justin Van Wart, a post-doctoral student in agronomy.

The Thought for Food contest is sponsored by Syngenta and Sandbox. In addition to Van Wart, members of the team are: Chris Proctor, a doctoral student in agronomy; Tobi Louw, a doctoral student in chemical engineering; Zach Christensen, undergraduate student in biochemistry; and adviser Martha Mamo, soil scientist in agronomy.

The UNL team calls itself CrOpportunity. Members set out to find an idea “that would catch on at the grass roots and spread and that wouldn't cost a lot of money,” Van Wart said.

They came up with the notion of giving consumers an option at participating restaurants of reducing their meal to healthier portions while still paying full price, with the difference in cost going to an organization that helps fight world hunger.

Van Wart said this concept simultaneously addresses two food issues: Many Americans eat too much while people in developing countries often don't have enough food. He and his team believe many consumers, if provided some simple facts about this dichotomy, would choose this option. Consumers would have the option to go to their website to pick the organization they want to donate to. Team member Zach Christiansen already has helped develop a smartphone app, PickIt, which does something similar.

Van Wart said the team envisions products or businesses being labeled as “food-secured,” much the same as products now get a “fair trade” label.

The international competition is in Germany in September. See <http://tffchallenge.com/team/croportunity/>.