ARS O You



Research for the Growing World

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Did You Know?

USDA 1862-2012 YEARS In honor of USDA's 150th anniversary celebration, on display until July 1 in the main lobby of the USDA George Washington Carver Center, Beltsville, MD, is a miniature barn

reproduction with fencing built with actual wood salvaged from two family barns in lowa built circa 1860 and 1894. The reproduction was built to preserve the unique function and features of family farm barns from that era, representing the state of the art for the farming community of the time. In the 1860s, barns provided all of the modern conveniences for a working farm of the time. Usually painted red, farm barns typically were built with raw lumber and erected by real "horsepower" by the farmer and his family and neighbors. A barn may have had a tack room and stalls for the working horses, a milking parlor for the milk cows, a granary or feed room for animal feed, penning for chickens and hogs, hay storage in

the loft, or all of the above. The reproduction depicts many of these functions. Constructed by and on loan from Mark Boggess, ARS National Program Leader for Animal Production/Genetic Programs, Beltsville, MD. *



Please submit story ideas and national award items to Sean Adams, sean.adams@ars.usda.gov or call 301-504-1617.

Around ARS



www.ars.usda.gov/yourtwocents

Are you engaged? Your Two Cents (Y2C) continues to be a forum for discussing ARS topics that matter to you! Remember, this month's theme is "Inclusion and Outreach." You can find links to AgLearn courses, books and activities to help you engage with colleagues, customers and stakeholders. Also, the time is almost here: YC2 is getting ready to celebrate its 2nd birthday! How do you think we should celebrate? What would you like to see from us in the future? Give us your input. And while you're there...don't forget to check out the Toolkit on the ARS Cultural Transformation site! &

The First 100 Days of AFM Restructuring

May 22 was the 100thday mark of the ARS Administrative and Financial Management (AFM) Restructuring. Here are some of the major accomplishments:

- Initiated the process for the Annual Resource
 Management Plan for FY 2013.
- Completed the Capital Project and Repair Plans with the participation of Business Service Centers' (BSC) engineers and Locations' Administrative Officers and Facilities Managers.
- Established Asset Management Review Boards with membership from Area Director's Offices and BSCs for each Area.

- Established functional cross-servicing for information technology, acquisition and property to cover staff shortages.
- Distributed relocation of 94 FY 2012 budget-impacted employees among seven Travel Specialists.
- Updated telework eligibility for all ARS employees as required by new Departmental policy.

Over the next few months, AFM staff will continue working toward normalizing administrative processes and establishing Customer Service Agreements for all the functional areas.

Need handouts and other tools to help you communicate to your audience about ARS? Visit the ARS Information Staff's Services Web site. There, you will find a collection of ARS information flyers, posters, and other materials for various outreach purposes. To learn more about these and other ARS Information Staff products and services, as well as view past and current ARS & You issues, visit www.ars.usda.gov/IS/services. *

The ARS Systematic Entomology Laboratory (SEL), Beltsville, MD, planned and staffed an ARS exhibit at the 2nd Annual USA Science & Engineering Festival in the Walter E. Washington Convention Center in Washington, DC, April 27-29, 2012. SEL featured an interactive hissing cockroach-termite-caterpillar exhibit, which was part of a larger USDA pavilion incorporating exhibits from other USDA agencies. There were more than 3,000 handson exhibits at the Festival, including a book fair, career pavilion, and presentations by well-known personalities like Bill Nye the Science Guy. Over 150,000 people participated in the Festival. ARS Office of Outreach, Diversity, and Equal Opportunity and ARS Information Staff personnel were there to help SEL staff as well. ❖



Brown marmorated stink bugs.

A workshop to help researchers and extension staff identify natural enemies of the invasive brown marmorated stink bug was organized by Supervisory Research Entomologist Kim Hoelmer, ARS European Biological Control Laboratory, Montpellier, France; Research Associate Christine Dieckhoff, ARS Beneficial Insects Introduction Unit, Newark, DE; and Research Entomologist Matthew Buffington, ARS Systematic Entomology

Laboratory, Washington, DC. Twenty-four participants from 11 states attended the 2-day workshop April 10-11, 2012, at the University of Delaware in Newark, DE. The workshop was organized to meet the needs of participants in a multi-institution Specialty Crop Research Initiative grant to develop integrated management approaches for controlling stink bugs. *

The SNAP-Ed Connection team, part of the USDA National Agricultural Library's Food and Nutrition Information Center, exhibited at the 15th Annual Priester National Extension Health Conference in Washington, DC, April 11-12, 2012. The conference drew approximately 200 Extension professionals, including many Supplemental Nutrition Assistance Program (SNAP) educators. The SNAP-Ed Connection team shared information about its Web-based resources and educational materials databases for SNAP educators, especially the Recipe Finder and the upcoming cookbook feature.



Animal Scientist Melissa Rubano speaks with middle school students about research projects at the University Park, PA, location.

Staff from the ARS
Pasture Systems
and Watershed
Management
Research
Laboratory
(PSWMRL),
University Park,
PA, participated
in the 3rd Annual
Park Forest Middle
School (PFMS) STEM
Fair on March 14,

2012. Around 850 PFMS students from 6th through 8th grade attended the fair. PSWMRL staff ran an interactive booth to present an overview of research and work at the location. The exhibit illustrated the science used to understand and improve animal nutrient uptake, waste

management, pasture productivity, biofuel production and nutrient management. An indoor rain simulator, provided by Pennsylvania State University's Department of Crop and Soil Sciences, demonstrated how soil conservation practices lower soil erosion. The goal of the fair was to let students know that science, technology, engineering,



Agricultural Science Research Technician Jeff Gonet demonstrates a rainfall/erosion simulator to students from Park Forest Middle School.

and math are "cool," and that careers in these fields are rewarding. ❖

The 22nd Annual ARS Eastern Regional Research Center (ERRC) Future Scientists Day was held on May 8. Eighteen students, accompanied by their sponsors and their families, visited the Center, during which they took a tour, displayed their exhibits, and interacted with Center staff. The students were chosen by a team of ERRC judges from nearly 1,000 exhibits at the Delaware Valley Science Fairs in April 2012.

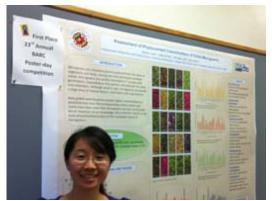
On May 9 and 10, ERRC held its Annual Career Days, hosting over 500 students grades 7 through 12 from Philadelphia, PA, and the surrounding region. The students learned about the importance of agricultural research in providing a safe and nutritious food supply, producing biobased products and developing sustainable biofuels. ARS scientists and engineers spoke about their research and provided this diverse group of students details about STEM (science, technology, engineering, and math) careers in the Federal Government. •



Photo Corner



Subsurfer (developed by ARS Soil Scientist Dan Pote, Booneville, AR) and a vegetable-oil-burning tractor at University Park, PA.



Ph.D. graduate student Zhenlei Xiao won first prize at the 23rd Annual BARC poster day competition for her work on the human nutritional content of microgreens.



USDA employees celebrated Earth Day by planting native sweetbay trees in Poplarville, MS.



Research Plant Molecular Geneticist Tim Rinehart and his son Jay pulled trash from sand bars and river banks.



2012 Open House at the U.S. Horticultural Research Lab in Fort Pierce, FL.

Notable Awards

2012 FLC National Technology Transfer Awards

FLC Awards for Excellence in Technology Transfer were presented to three ARS teams on May 3 at the FLC National Meeting in Pittsburgh, PA. Research Entomologists **Bob Danka** and **Jeff Harris**, ARS Honey Bee Breeding, Genetics and Physiology Laboratory, Baton Rouge, LA, won for "Honey Bees With Varroa Sensitive Hygiene." The team also included Tom Glenn and Suki Glenn of Glenn Apiaries, Fallbrook, CA. *

Research Horticulturist Jonathan Frantz, Information Technology Specialist Bryon Hand, former Biological Science Laboratory Technician Deanna Bobak, and former Information Technology Specialist Lee Buckingham, ARS Application Technology Research Unit, Toledo, OH, won for "Virtual Grower Software for Greenhouse Crop Production." Also on the team was Erik Runkle, Michigan State University, East Lansing, MI. *

Ecologist Roger Sheley and Research Agronomist Brenda Smith, both with the ARS Eastern Oregon Agricultural Research Center, Burns, OR; Plant Physiologist Stuart Hardegree, ARS Northwestern Watershed Research Center, Boise, ID; and Research Ecologist Thomas Monaco, ARS Forage and Range Research Laboratory, Logan, UT, won for "Ecologically Based Invasive Plant Management of Invasive Annual Grasses." The team also included Ryan Steineckert, Oregon State University, Corvallis, OR. *

The Harold Metcalf Award, the highest FLC honor bestowed to technology transfer professionals, went to **Victor Chavez**, Technology Transfer Coordinator (retired), ARS Eastern Regional Research Center, Wyndmoor, PA. *



Andy French.

Physical Scientist **Andy French**, ARS Arid-Land Agricultural Research Center, Maricopa, AZ, has been selected for the *Journal of Irrigation and Drainage Engineering*'s Best Paper Award for his article "Combining Remotely Sensed Data and Ground-Based Radiometers to

Estimate Crop Cover and Surface Temperatures at Daily Time Steps." His award is scheduled to be presented during the 2012 Environmental & Water Resources Institute-American Society of Civil Engineers Conference in Albuquerque, NM, May 20-24. •

Agronomist Chester
"Chet" Dewald, who
retired in 2002 after a
28-year career with the
ARS Southern Plains
Range Research Station,
Woodward, OK, has been
honored posthumously
as a Master Agronomist
by Oklahoma State



Chet Dewald

University's Division of Agricultural Sciences and Natural Resources. The award recognizes Oklahoma agriculturists who actively participate in agronomic education programs and contribute valuable public service through their efforts in soil conservation, range management, or crop production. Dewald made significant contributions toward the development of a number of grasses, including many varieties of native grasses. To honor Dewald after his passing in 2002, ARS named and released "Chet," an improved sand bluestem variety. *

Contributors to this issue:

We thank the following individuals for contributing stories, ideas, photographs, and their time to this issue:

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Did You Know?



Galaxy magnolia tree.

Scientists at ARS's U.S. National Arboretum (USNA) Floral and Nursery Plants Research Unit (FNPRU) in Washington, DC, have developed

more than 650 different woody and herbaceous plants over the past 80 years. These new plants have been released to the public through the nursery and floral industries. Since these plants are adapted to various U.S. plant hardiness zones, you're likely to see them thriving and blooming all over the country.

Making headlines for its prominent newest development this spring, FNPRU released a new cherry tree variety, 'Helen Taft,' to commemorate the 100th anniversary of the Japanese gift of cherry trees. The showy cherry blossoms that currently paint the Tidal Basin in Washington, DC, draw millions of visitors each year to our Nation's capital. The trees symbolize the friendship between the United States and Japan. First Lady Helen Herron Taft and Viscountess Iwa Chinda, wife of the Japanese ambassador, planted the first two cherry trees at the Tidal Basin on March 27, 1912. The flowering cherry blossoms are now one of the most celebrated icons of our Nation's capital.

The Arboretum has received 15 total Gold Medal Plant awards and All-America Selections (AAS) Winners. The Gold Medal Plant Award is presented by various well-known horticultural societies, like The Pennsylvania Horticultural Society, which recognizes outstanding trees, shrubs, and woody vines. The AAS Winners are presented by All-America Selections, a non-profit organization, to recognize the best garden performers.

Among this distinguished group of garden rock stars is the dramatic ornamental pepper 'Black Pearl,' designed for containers or garden borders. The peppers on this plant emerge black and turn cherry red, making for a spectacular garden show from summer to fall. And, the belle of the South, 'Galaxy,' is a unique magnolia tree that emerges with dark-red-purple flowers in the spring after all frost and snow has melted away. In fact, USNA has had a series of commercially successful crapemyrtle releases—as well as other plant varieties. Approximately 75% of the roughly 2 million crapemyrtles sold in the United States are USNA releases, and have an estimated market value of \$32 million.

The USNA serves as a kind of "Plant Hall of Fame," featuring garden legends that will go down in history. It is a living repository that preserves plant material and seeds for future research endeavors, as well as for the public to admire, appreciate, learn about, and enjoy for decades and centuries to come.

Written by Tara T. Weaver-Missick, ARS Information Staff.



'Helen Taft' cherry blossoms.



'Black Pearl' ornamental pepper plants.