



Research for the Growing World

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feds **feed** families

The <u>Feds Feed Families</u> (FFF) campaign is well underway. Are you collecting for a local food bank at your location? This time of year is especially hard for children at risk for hunger, as their school lunch programs are often the only way they get a well-balanced meal for the day. Moreover, food bank supplies tend to wane after the holiday season ends, so it's more important now than ever to keep them well stocked.

Canned goods aren't the only way to go. All over the country there are networks of organizations that coordinate gleaning efforts. "Gleaning" is the collection of "leftover" crops from farm fields—or of other leftover foods—that otherwise would go to waste. The USDA has a great online toolkit with lots of information about how this process works.

If you would like to set up a gleaning effort in your community, here are some organizations that can help connect you with a producer with crops to glean:

- Mid-Atlantic Gleaning Network
- Society of St. Andrew
- <u>Village Harvest</u>
- Gleaning Network of Texas
- Gleaning Network of Southern Oregon
- Vermont FoodBank

These organizations are all over the country. Try an Internet search for "gleaning program" and you're sure to find one near you. If you get a group together for a gleaning effort, be sure to have the donations weighed—most food banks are happy to do this for you—so that you can count the amount towards ARS's FFF donations. Email **Ellen Buckley** with your donation amounts or if you have any questions.

And here's an inspiring example of an ARS location's gleaning efforts: over 9,000 lbs of bass donated to local food banks by the ARS Harry K. Dupree Stuttgart National Aquaculture Research Center in Stuttgart, AR. Read all about the Center's FFF contributions at http://www.stuttgartdailyleader.com/article/20140623/NEWS/140629869/0/SEARCH.

Please submit story ideas and national award items to Mina Chung, mina.chung@ars.usda.gov, or call 301-504-1653.



www.ars.usda.gov/yourtwocents

Your Two Cents (Y2C)

Happy summer from Y2C! Idea submissions to Y2C have been slow but steady. A lot of good feedback has come in after ARS Administrator Chavonda Jacobs-Young's State of the Agency address on June 24, 2014. The video and transcript have both been posted to Axon, so check them out if you didn't have a chance to tune in live. Both can be found on the Administrator's Corner page. And what did you think of the State of the Agency webcast? Leave us a comment!

Now that <u>Axon</u> has launched, our Web programmer has a bit more time to work on fixes and improvements to <u>Y2C</u>. Please stay tuned as we work our way through the list of requests.

Is there a rock star in your office—someone who always goes above and beyond to get things done? There's a new peer recognition site on Axon—<u>StARS</u>. You can nominate anyone or any group to get a "shout-out" for their accomplishments. It's always great to hear from your peers that you're doing a good job, so please make use of this tool!

Photo Model Release Forms

The ARS Information Staff gets a lot of photo submissions to use as part of its social media efforts—e.g., live tweeting of events—and for other communications products, such as the ARS & You newsletter. Please note that we are required to obtain signed model releases from all persons photographed who are not USDA employees. If a minor (anyone under the age of 18) is photographed, we are required to have a signed model release from his/her legal guardian. To help you with "capturing" your events, we are including a link here to the model release forms—one for adults and one for minors. Before you take your photos, please remember to tell the "model(s)" first—and if it's a minor, you must get his/her parent's or legal guardian's permission—that their photograph(s) might be used in various public communications products, including on social media platforms like Twitter and Facebook. If they are okay with it, be sure to have them sign the form then. That way, you won't have to track the "models" down later for their permission! We love the great photos that have come in for Twitter and ARS & You—as you will see in this month's Photo Corner—and on the @USDA_ARS Twitter feed! &

Around ARS



ARS Science Hall of Fame inductees L. Dale Van Vleck (left) and Larry Cundiff celebrate the 50th Anniversary of ARS's Roman L. Hruska U.S. Meat Animal Research Center. See more in Photo Corner.

To celebrate the 50th anniversary of ARS's Roman L. Hruska U.S. Meat Animal Research Center (MARC) in Clay Center, NE, different special events have been taking place this year. One such event, the 50th Anniversary Symposium, was held on June 4, 2014, and was attended by legislators, agency leaders, retired MARC scientists and administrators, stakeholders, and other special guests. The symposium commenced with presentations by Steven Kappes, ARS Deputy Administrator for Animal Production and Protection; Center Director Emil J. (John) Pollak; and Ronnie Green, former ARS National Program Leader for Food Animal Production. The theme was "the Value of Publicly Funded Research." Other activities included poster presentations by Center scientists and driving tours of the property. Attendees also were treated to a special presentation on the history of the Center given by retired Research Geneticist Larry Cundiff, a 2012 ARS Science Hall of Fame inductee. MARC encompasses 34,000 acres of land; boasts large populations of beef cattle, sheep, and swine; and is home to a premier research program focusing on solutions to high-priority problems in meat animal production. See Photo Corner. &



Agricultural Science Research Technician Jason Okamoto teaches future scientists how to make hibiscus cuttings. See Photo Corner for more.

ARS's Daniel K. Inouye U.S. Pacific Basin Agriculture Research Center (PBARC) in Hilo, HI, participated in Take Our Daughters and Sons to Work Day on April 23, 2014. Each year, PBARC employees are invited to bring their children, nieces, nephews, or grandchildren to work, and every child also can bring a friend. To keep the young visitors engaged, the demonstrations were kept under 30 minutes and were designed to be hands-on. Richard Ha, president of Hamakua Springs Country Farms, contributed tomato flowers for use in a hands-on activity where kids learned to put a tomato flower in sterile culture and grow their own tomato. They also learned how to extract purple pigment from "red" cabbage and detect whether papaya seeds were genetically modified for papaya ringspot virus. Activities also included studying the different life stages of the sweet potato moth, analyzing "odors" from noni fruit juice using mass spectroscopy, propagating hibiscus by cuttings and grafting, and watching genomic data-crunching on computers. The children also learned about the various jobs that support the work at the facility, such as administration and information technology. See Photo Corner. &

Last year, the **U.S. National Arboretum** launched Arboretum Botanical Explorer (ABE), a Web-based map interface that allows scientists, horticulturists, landscape designers, and the general public to pinpoint individual plants in the Arboretum's nearly 14,000 ornamental landscape plants and view images and data linked to those plants. ABE also helps users find memorial trees and benches on the 446-acre Washington, DC, campus of the Arboretum. Users can even use ABE to design their own tour of the grounds. ABE was recently featured on Information Week Government, where it was cited as "Government Data + Maps: 10 Great Examples." Visit ABE at http://usna.usda.gov/abeintro.html.



Staff and visitors sample ethnic cuisine during the Asian-Pacific American Heritage Month celebrations in Athens, GA. See PhotoCorner for more.

ARS and Food Safety and Inspection Service (FSIS) employees at the ARS Richard B. Russell Agricultural Research Center and the ARS Southeast Poultry Research Laboratory in Athens, GA, celebrated Asian-Pacific American Heritage Month on May 8, 2014, in the Center's auditorium with guests from the other USDA agencies in the Athens area. The program was kicked off with opening remarks by Joseph Hill, Scientific Advisor for Laboratory Services at FSIS's Office of Public Science. Next was a talk given by Microbiologist Brian Oakley, ARS Poultry Microbiological Safety and Processing Research Unit, Athens, GA, about his time in Japan as part of the Japan Exchange and Teaching Program sponsored by the Japanese Ministry of Education. The celebration also featured a classical Indian dance performance by special guest Debolina Chatterjee and a sampling of international treats such as Chinese noodles, Pacific Islander pineapple pudding, Indian poori, Pakistani vegetable biryani, Japanese sushi, and Thai egg rolls. See Photo Corner. &

On May 28, 2014, the first student-run *Lilioceris cheni* (Lili) beetle-rearing laboratory in the United States was dedicated at the TERRA Environmental Research Institute (TERRA) in Miami, FL. ARS's Invasive Plant Research Laboratory (IPRL) in Fort Lauderdale, FL, provided the "Adam and Eve" initial starter beetles as part of a partnership between Miami-Dade Parks' Natural Area Management Division, ARS, and TERRA. The Lili beetle is being bred at the new facility to combat the invasive air potato vine plaguing parks and neighborhood yards throughout South Florida and the rest of the State. Among those who attended the ceremony were ARS Research Plant Pathologist Min B. Rayamajhi, IPRL; TERRA students and faculty; Miami-Dade County District 10 Commissioner Javier D. Souto; and representatives from Miami-Dade Parks. Watch an interview with Rayamajhi at http://www.usatoday.com/videos/news/ nation/2014/05/28/9691067/. &



From left: Senator Mazie Hirono, Pacific West Area Director Andrew Hammond, and ARS Administrator Chavonda Jacobs-Young. See Photo Corner for more.

In a ceremony on July 2 in Hilo, HI, ARS paid tribute to the late Senator Daniel K. Inouye for his distinguished public service by renaming the U.S. Pacific Basin

Agricultural Research Center (PBARC) in his honor. The new name of the facility is the Daniel K. Inouye U.S. Pacific Basin Agricultural Research Center. Honored guests included Irene Inouye, widow of the senator and President of the U.S.-Japan Council, Senator Mazie Hirono, and U.S. Representative Colleen Hanabusa. ARS Administrator Chavonda Jacobs-Young provided opening remarks, followed by Pacific West Area Director Andrew Hammond's announcement of 15 Service Award winners. Following a hula performance by the "DKI-PBARC Hula Ladies," Hammond presented a Special Recognition Award to **Dennis Gonsalves**, Director of the Center from 2002 to 2012 and a 2007 ARS Science Hall of Fame inductee. The keynote address was delivered by Jennifer Sabas, Director of the Daniel K. Inouye Institute. With an attendance of about 200, the ceremony was followed by a reception and guided tours. See Photo Corner. &

On July 8, café patrons at the USDA George Washington Carver Center (GWCC) in Beltsville, MD, were guided through an online search of 3,000+ food items to discover what



Research Assistant Melanie Hymes, left, helps Deputy Administrator Sally Schneider look up nutrients. See Photo Corner for more.

nutrients were lacking or packing in their specific diets. The online search tool, called "What's In The Foods You Eat," was developed by the ARS Food Surveys Research Group (FSRG) in Beltsville, MD. The interactive exhibit was a collaborative effort between the ARS Information Staff, FSRG, and GWCC facilities and café management. A number of ARS, Food Safety and Inspection Service (FSIS), and Natural Resources Conservation Service (NRCS) units are located in GWCC. See Photo Corner.

To celebrate Forest Service icon Smokey Bear's 70th birthday, a set of original paintings of Smokey done by artist Rudy Wendelin—part of the National Agricultural Library's Special Collections—are on loan to the Chrysler Museum of Art in Norfolk, VA, for a special exhibit. Wendelin was a Forest Service employee from 1949 to 1973. To view the exhibit, visit http://www.chrysler.org/exhibitions/70-years-of-smokey-bear/. Special Collections also created several sets of framed reproductions of the Wendelin works, which currently are traveling around the country. Smokey also is on exhibit at the Idaho Capitol and the Nebraska Firefighters Museum and Education Center.

Employees at the ARS **Grand Forks Human Nutrition Research** Center (GFHNRC) in Grand Forks, ND, participated in this year's "Walk the Talk" program—an annual spring tradition at the Center, which conducts research related to preventing obesity and related disorders. Walk the Talk encourages employees to be physically active by challenging each to



GFHNRC employees reach the peak of "Mount Dakota."

walk 1 million steps in 100 days—10,000 steps per day as recommended by the National Institutes of Health. This year's program was coordinated by Center Dietitian Angie Scheet. Each employee was given a pedometer with an invitation to participate from Center Director Gerald F. Combs, Jr. The Center's Information Technology (IT) group created an online step log, and collective progress was tracked weekly by advancing the image of an Alpine couple along the winding path up "Mount Dakota—the highest mountain in North Dakota." The program also involved monthly brown bag talks about fitness, healthy shopping, "deskercise," and other health-related subjects. This year, 39 employees enrolled in Walk the Talk, and 35 completed the 100-day challenge. The final step count showed an average 1,002,009 per participant, putting GFHNRC employees at the top of the mountain!



Research Agronomist Kip Balkcom points out residue management modifications made to a planter to improve success in establishing a crop in conservation systems.

On June 12, 2014, four researchers from the ARS National Soil Dynamics Laboratory in Auburn, AL—Research Agronomist **Kip Balkcom**, Agricultural Engineer **Ted Kornecki**, Plant Physiologist **Andrew Price**, and Agricultural Economist **Leah**

Duzy—hosted 18 Auburn University students taking a soil and water resources conservation class. The students heard presentations from each of the scientists about their research areas related to conservation systems including agronomy, economics, engineering, and weed management. The students also viewed equipment used in conservation systems, including a planter, a within-row subsoiler, and a cover crop roller/crimper used for cover crop termination. The event ended with a tour of the laboratory. *****

Research Leader and Animal Scientist Glen Aiken and Research Microbiologist Michael Flythe, ARS Forage-Animal Production Research Unit, Lexington, KY, gave demonstrations at the Kentucky State University Farm on June 24, 2014, to 20 high-school students who participated in the USDA Ag Discovery Program. This 7-week program is sponsored and coordinated by the Animal and Plant Health Inspection Service (APHIS) to provide an opportunity for high-school students to learn about careers in plant, animal, and veterinary sciences. Aiken demonstrated the use of ultrasound in conducting animal research and discussed career opportunities in agriculture. Flythe demonstrated the use of microscopy to study microbes that populate the rumens of large and small ruminants, and discussed the important role of microbiologists in conducting research that can improve the efficiency and sustainability of food animal production.

Notable Awards

Research Agricultural Engineer Mark
Nearing, at the ARS
Southwest Watershed
Research Unit in
Tucson, AZ, was
selected to receive the
2014 Hugh Hammond
Bennett Award by
the Soil and Water
Conservation Society
(SWCS). The award was
presented at SWCS's
69th International



Mark Nearing.

Annual Conference on July 27-30 in Lombard, IL. This is the highest honor bestowed on an individual by SWCS and is considered to be a lifetime achievement award in conservation.



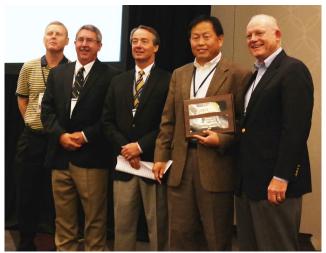
Jerry L. Hatfield.

Jerry L. Hatfield, **Supervisory Plant** Physiologist and Director of ARS's National Laboratory for Agriculture and the Environment in Ames, IA, was selected to receive the Journal of Soil and Water Conservation's Best Research Paper Award for Impact and Quality. The article, entitled "Nitrate-Nitrogen Patterns in the Raccoon River Basin Related to Agricultural Practices," was published

in 2009. The award was presented at the <u>Soil and</u> <u>Water Conservation Society's</u> 69th International Annual Conference on July 27-30 in Lombard, IL. *

Research Horticulturist and Research Leader Ed Stover, Plant Pathologist Richard Stange, and Research Plant Physiologist T. Gregory McCollum—all at ARS's U.S. Horticultural Research Laboratory in Ft. Pierce, FL—received the Outstanding Fruit Publication Award from the American Society for Horticultural Science (ASHS). The paper "Screening Antimicrobial Peptides In Vitro for Use in Developing Transgenic Citrus Resistance to Huanglongbing and Citrus Canker" appeared in the Journal of the American Society for Horticultural Science. The award was presented during the ASHS Annual Conference on July 28-31 in Orlando, FL. *

Research Plant Geneticist **Charles "Chuck" Brown**, at the ARS Vegetable and Forage Crops Production Research Unit in Prosser, WA, was selected by the <u>Potato Association of America (PAA)</u> for its Award of Honorary Life Membership in recognition of his lifetime services to the U.S. potato industry. The award was presented at the annual PAA conference on July 27-31 in Spokane, WA. *



Baozhu Guo (second from right).

On June 22, 2014, Research Plant Pathologist Baozhu Guo, at the ARS Crop Protection and Management Research Unit in Tifton, GA, received the 2014 Peanut Research and Education Award during the 18th Annual USA Peanut Congress—a joint annual meeting of the American Peanut Council and the American Peanut Shellers Association—in Nashville, TN. The award recognizes individuals or teams conducting research and/or education programs that benefit the entire peanut industry. Guo was selected for his significant contributions to peanut genome sequencing and advancing peanut varieties.

Lead Scientist **Steven Lehotay**, ARS Eastern Regional Research Center, Wyndmoor, PA, recently received the "Highly Cited Researcher" classification from Thomson Reuters. The "Highly Cited Researcher" status is conferred on authors whose papers have been cited at least 1,000 times based on statistics compiled by Thomson Reuters. *****

Research Biologist Heng-wei Cheng, at the ARS Livestock Behavior Research Unit in West Lafayette, IN, received this year's Poultry Science Association's Poultry Welfare Research Award. The award was presented on July 16 during the organization's annual meeting in Corpus Christi, TX.

On June 13, 2014, June Blalock, who retired this April after 21 years at ARS's Office of Technology Transfer (OTT) in Beltsville, MD, received the 2014 Distinguished Service Award at the American Seed Trade Association's 131st Annual Convention in Indianapolis, IN. The award honors those



American Seed Trade Association's Craig Newman presents the Association's 2014 Distinguished Service Award to June Blalock.

who have made significant contributions to the seed industry and to the association. Blalock was a technology licensing program coordinator at OTT. *



Edward L. Skidmore.

Edward L. Skidmore, a former Research Leader at the ARS Engineering and Wind Erosion Research Unit in Manhattan, KS, was recently honored with the Distinguished Career Award by the International Society for Aeolian Research. This was only the second time the award was presented since the society was established in 2008. The award was presented

during the International Conference on Aeolian Research on July 21-25 in Lanzou, China. Skidmore retired in 2007.

Research Animal Geneticist **George Wiggans**, at the ARS Animal Genomics and Improvement Laboratory in Beltsville, MD, and his co-authors received the *Journal of Dairy Science* Most-Cited Award in Genetics and Breeding for their paper "The Genomic Evaluation System in the United States: Past, Present, Future," published in June 2011. The award was presented on July 22 during the American Dairy Science Association's annual meeting in Kansas, MO. •



Photo Corner



Biological Science Technician Charmaine Sylva explaining the different life stages of moths. (See story in <u>Around ARS</u>.)



Biological Science Technician Angelica Tangalin teaching students how to grow a tomato fruit in culture. (See story in <u>Around ARS</u>.)



Arts and Information Specialist Nancy Vanatta, left, and Biological Science Technician Caitlin Walker exploring an interactive nutrient search tool. (See story in <u>Around ARS</u>.)



Insect-themed cake at the farewell party for Dan Strickman, former ARS National Program Leader for Veterinary and Medical Entomology.



Left: Emil J. (John) Pollak, Center Director, ARS Roman L. Hruska U.S. Meat Animal Research Center, speaking with Nebraska State Senator Dave Bloomfield during the Center's 50th Anniversary Symposium. (See story in <u>Around ARS</u>.)



Staff and visitors enjoying lunch during the 50th Anniversary Symposium at ARS's Roman L. Hruska U.S. Meat Animal Research Center. (See story in Around ARS.)



Center: Dennis Gonsalves, former Director of ARS's U.S. Pacific Basin Agricultural Research Center, and Mrs. Gonsalves leading attendees in a song at the Center's renaming ceremony in Hilo, HI. (See story in <u>Around ARS</u>.)



Special guest Debolina Chatterjee performing a classical Indian dance to celebrate Asian-Pacific American Heritage Month in Athens, GA. (See story in <u>Around ARS</u>.)



Newly renamed—the Daniel K. Inouye U.S. Pacific Basin Agricultural Research Center in Hilo, HI. (See story in <u>Around ARS</u>.)

Díd You Know?



Native-American high-school students getting up close and personal with bees.

At the lab, the students put on bee veils and visit the apiary, seeing the bees up close and personal. They also work in the honey production and packing area, extracting honey from the comb and bottling it.

Since the Institute started in 1998, hundreds of students have participated in the program. Some even became interns at the lab, according to **Gloria DeGrandi-Hoffman**, the lab's Research Leader. "We had about a dozen students this year," she said. "It's a great program and we are proud to be part of it."

Written by **Sean Adams**, ARS Information Staff.

There's nothing like a little "hands-on" activity to help students learn. And what better way to encourage mathematics and science education than to give students an opportunity for the ultimate "hands-on" experience: working with honey bees?

That's what Native-American high-school students are doing at the ARS Carl Hayden Bee Research Center in Tucson, AZ. Lab researchers study honey bee nutrition and health to ensure that these insects can effectively pollinate billions of dollars' worth of fruits and vegetables each year.

The students study at the Tucson lab through the Native American Summer Institute, which began in 1998 as a collaborative program between the University of Arizona and the Bee Center in Tucson. The curriculum developed for the Institute uses bees as a learning tool to help the students learn mathematics and science. The students use two of the lab's computer models, BEEPOP and BK-ECONOMICS, to learn about honey bee colony health and to develop plans to start a beekeeping business.

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