ARS & You

Research for the Growing World

February 2012 www.ars.usda.gov

Three Business Service Centers To Offer "Super Service" to ARS Customers

To tie in with **USDA Secretary Tom Vilsack's** "Blueprint for Stronger Service," a new ARS Administrative and Financial Management (AFM) organization will serve the business needs of USDA's Research, Economics and Education (REE) Mission Area—which includes ARS employees.

As part of ARS's administrative restructuring efforts, three Business Service Centers (BSCs) will serve REE employees with "virtually" centralized staff from Headquarters, Area offices, and the National Agricultural Library (NAL). The National Capital Business Service Center will serve ARS Headquarters, NAL, and our sister REE agencies (National Agricultural Statistics Service, Economic Research Service, and National Institute of Food and Agriculture). The Eastern Business Service Center will serve ARS's Beltsville, North Atlantic, South Atlantic, and Midwest Areas. The Western Business Service Center will serve ARS's Pacific West, Southern Plains, Northern Plains, and Mid South Areas.

A new automated system will assist staff in tracking the status of actions and communicating with the BSCs and the AFM divisions.

Please check out the Go-Live Implementation Plans and Staffing Charts available on USDA Connect and AFM's Web sites, and stay tuned for updates on training and discussion opportunities! For background information, see the **October 2011 issue** of *ARS & You*. ✤

Keep It Simple!

The Plain Writing Act of 2010 requires all Federal agencies to write "clear Government communication that the public can understand and use." To help meet the Department's goals for providing clear, understandable information to the public, all USDA agencies are actively involved in training and providing resources to staff in writing plainly. A number of writing resources are available on AgLearn, including the USDA Plain Writing AgLearn Training to help you with your efforts. In addition, we are planning and developing a Web-based seminar and other resources for ARS locations in the coming months—so stay tuned! If you are interested in a Web-based seminar for your location, or want other information or plain writing assistance, please contact ARS' Plain Writing Coordinator **Tara T. Weaver-Missick** (301-504-1663). ✤

In this edition...

Please submit story ideas and national award items to Tara T. Weaver-Missick, tara.weavermissick@ars.usda.gov or call 301-504-1663.

Your Two Cents

www.ars.usda.gov/yourtwocents

Your Two Cents (Y2C) continues to be a forum for discussing ARS topics that are important to *you*! Check out the latest ideas submitted by your colleagues, and submit your own.

Based on the success of previous Y2C webinar of important ARS happenings such as budget reductions and location closures, an entire afternoon session of the February Administrator's Council meeting, on February 8, was opened to ARS employees via Web conference. Topics such as the new USDA Plant Hardiness Zone Map, Regional Biomass Research Center activities, and science snapshots from ARS pioneers were presented. There also was an opportunity for employees to submit questions to ARS leadership. Those questions and written responses will be posted to the Y2C Web site over the next couple of weeks. Feedback for the webinar was positive, so look for more such webinars to come!✤

ARS Cultural Transformation

Is the training budget in your unit non-existent? You aren't alone. Check out the Toolkit on the ARS Cultural Transformation site! Our theme for February/March is "Work-Life Balance." You can find links to AgLearn courses on this topic, as well as books and activities for your use.✤

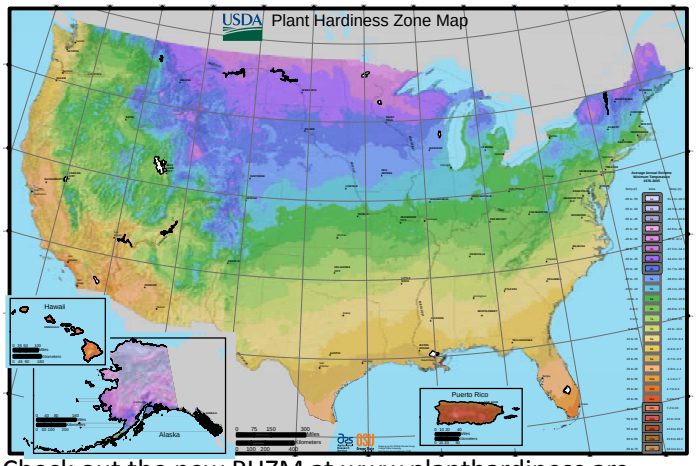
Around ARS

REE Under Secretary Catherine Woteki.

REE Under Secretary Catherine Woteki unveiled the 2012 USDA Plant Hardiness Zone Map (PHZM) at a media event held at ARS' U.S. National Arboretum, Washington, DC, on January 25, 2012.

The 2012 PHZM (covering 1974-2005) contains 18 more years' worth of data than the 1990 edition (covering 1974-1986). The new, interactive PHZM Web site allows users to search plant hardiness zones by ZIP code, and offers national, regional, and state static jpeg images in different resolutions and formats.

Plant hardiness zones are based on the annual lowest temperature averaged over a number of years at a given location—not the lowest it has ever been or the lowest it will ever be at that location. This information is beneficial to the Nation's 80-million-plus gardeners, plant breeders, growers, and nurseries.



Check out the new PHZM at www.planthardiness.ars.usda.gov!✤

Bell Aquaculture Facility.

Research and technology development was showcased in an event titled "The Future of Fish," held in the newly expanded Bell Aquaculture Facility in Redkey, IN, on January 11, 2012. Representing ARS were **Jeff Silverstein**, ARS National Program Leader for Aquaculture, Beltsville, MD; Area Director **Larry Chandler**, ARS Midwest Area, Peoria, IL; Center Director **Neal Martin**, ARS U.S. Dairy Forage Research Center, Madison, WI; Research Physiologist **Rick Barrows**, ARS Fish Technology Center, Bozeman, MT; and Research Physiologist **Brian Shepherd**, ARS Dairy Forage and Aquaculture Research Unit, Madison, WI.

The new facility pumps thousands of gallons of water a minute, and has the capacity to produce 1,000 tons (2 million pounds) of yellow perch each year. Only 30 gallons of "new" water per minute is required to run the entire operation, thanks to the water reuse technology developed by the Conservation Fund's Freshwater Institute.

ARS scientists worked with research partners—University of Wisconsin-Milwaukee, National Oceanic and Atmospheric Administration (NOAA) Sea Grant, Indiana Soybean Alliance, and Virginia Cobia Farms—to ensure success of the sustainable fish farming operations at Bell Aquaculture, which produces 450 tons of fish annually.✤

Atlantic salmon.

Seven food banks received a whopping 3,270 pounds of salmon and 7,075 pounds of potatoes from two ARS facilities in Maine in 2011.

As part of its breeding program, each year, employees at the ARS National Cold Water Marine Aquaculture Center (NCWMAC), Franklin, ME, keep the best fish (high-reproductive performers), and donate poor-reproductive performing fish to local food banks.

Center Director **Bill Wolters** and Biological Science Technicians **Melissa Albert**, **Ryan Hastey**, **Davin O'Connell**, and **Sharon Baron** are responsible for preparing the fish for shipping to area food banks. NCWMAC has been donating fish to local food banks for around 4 years.✤

Potatoes.

Although potatoes are the main commodity grown for research purposes at the ARS New England Plant, Soil, and Water Laboratory (NEPSWL), Orono, ME, staff started a small vegetable garden in 2010 as part of the People's Garden Initiative. Vegetables grown in the garden are given to local food pantries. Laboratory staff tends to the vegetable garden on their own time.

Research Plant Pathologist **Bob Larkin** and Biological Technicians **Peggy Pinette** and **Ethel Champaco** coordinate this effort for the lab. NEPSWL has been donating to local food banks for at least 8 years.✤

Notable Awards

Sheila McCormick.

Research Plant Molecular Geneticist **Sheila McCormick**, ARS Plant Gene Expression Center, Albany, CA, and Research Geneticist **Michael D. McMullen**, ARS Plant Genetics Research Unit, Columbia, MO, have been elected Fellows of the American Association for the Advancement of Science (AAAS). McCormick is being honored for distinguished contributions in plant reproductive sciences. McMullen is being honored for his career-long contributions to the field of maize genetics.

Michael D. McMullen.

Also, Eliot Herman, a Plant Physiologist formerly with ARS Plant Sciences Institute, Beltsville, MD, has been elected AAAS Fellow for his contributions to the field of seed biology and biotechnology.

McCormick, McMullen, and Herman were inducted on February 18, during AAAS' Annual Meeting in Vancouver, BC, Canada.✤

Research Entomologists **Bob Danka** and **Jeff Harris**, ARS Honey Bee Breeding, Genetics, and Physiology Laboratory, Baton Rouge, LA, won the 2011 Federal Laboratory Consortium (FLC) Southeast Region Excellence in Technology Transfer Project of the Year Award for transferring the technology "Honey Bees with Varroa Sensitive Hygiene." The winning team also includes Tom and Suki Glenn of Glenn Apiaries, Fallbrook, CA.

Agnes M. Rimando.

Agnes M. Rimando, ARS Natural Products Utilization Research Unit, University, MS, won the 2011 FLC Southeast Region Excellence in Technology Transfer Award for transferring the technology "Health Benefits of Pterostilbene."

Chemists **Kim Daigle** and **Frederick Shih** (retired), ARS Food Quality and Sensory Quality Research Unit, New Orleans, LA, won an for transferring the technology "Low Oil Uptake Rice Flour Batters." Also on the team are CrispTek owners Ron Friedman, John Howell, Ray Jones, Roch Kallmyer, and Wayne E. Swann, who licensed and developed the ARS technology into a commercial product.

All awardees were recognized at the annual FLC Southeast Region Conference on February 8, in Orlando, FL.✤

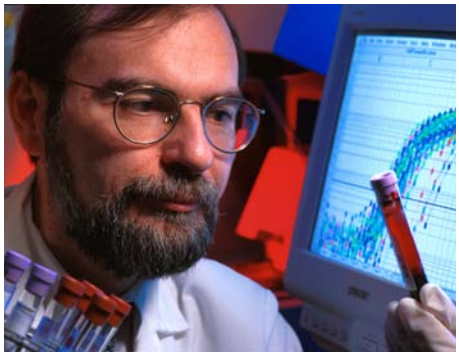
Soil Scientist **Lloyd Owens** (retired), ARS North Appalachian Experimental Watershed, Coshocton, OH, received the Outstanding Member Award for the All-Ohio Chapter of the Soil and Water Conservation Society at its winter meeting on January 17, 2012.✤

Electronic Engineer **Samir Trabelsi**, ARS Quality and Safety Assessment Research Unit, Athens, GA, has been honored as an Institute of Electrical and Electronics Engineers (IEEE) Fellow for contributions to microwave measurements on particulate materials for agriculture.✤

From left to right: Mark Williams, Mississippi Department of Environmental Quality, Administrative Officer Susan Herrin, and Biological Science Technician Chris Werle.

The ARS **Thad Cochran Southern Horticultural Laboratory**, Poplarville, MS, won the 2011 Annual Environmental Hero Award as the Recycler of the Year for Federal and State Government agencies in the State of Mississippi for recycling efforts at the facility and also for efforts to promote recycling in the local community. Lab employees implemented a successful recycling program to collect cardboard, paper, plastic, and steel and aluminum commodities at the facility. They also hosted a local symposium on how to implement recycling programs in rural communities. ARS staff are working with various civic organizations in Poplarville to ultimately help support a profitable recycling business in the area.✤

Plant Physiologist **Dale L. Shaner**, ARS Water Management Research Unit, Fort Collins, CO, was named "Outstanding Reviewer" by the Weed Science Society of America (WSSA) for his contributions to the journals *Weed Science* and *Weed Technology* for the past year. Shaner was recognized on February 6, during the 2012 WSSA Annual Meeting in Waikoloa, HI.✤



José M. Ordovás.

José M. Ordovás, Director, Nutrition and Genomics Laboratory, Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University in Boston, MA, received the 2011 Grand Prix de la Science de l'Alimentation from the International Academy of Gastronomy. This prestigious food science research award honors an individual or an organization for advancing food and nutrition research at the international level.✤

Did You Know?

You've probably heard of Hawaiian Kona coffee, but did you know that the 50th state also exports delicious fruits with names like "rambutan," "longan," and "dragon fruit"?

It wasn't always easy for us on the mainland to get our hands (and mouths) on fruits and vegetables from Hawaii because of the threat of fruit flies and other pests.

Scientists at the ARS U.S. Pacific Basin Agricultural Research Center in Hilo, HI, were the first to apply generic irradiation protocols to control quarantine insect pests found on fresh commodities.

Working with colleagues from USDA's Animal and Plant Health Inspection Service (APHIS), local growers/exporters, and others, ARS scientists found that a generic dose of 150 grays (Gy) of radiation can effectively control several species of fruit flies—Mediterranean fruit fly, oriental fruit fly, melon fly, and solanaceous fruit fly—in Hawaii, and a generic dose of 400 Gy can be effective against many other pests. These findings enabled APHIS to approve using generic doses on Hawaiian produce.

The ARS researchers made sure that the treated fruit would look, feel, and taste the same to consumers by conducting tests to find the maximum dose the fruit and vegetables could tolerate without a decline in quality.

So the next time you bite into a mouth-watering piece of fruit from the Aloha State, you'll appreciate not only the taste of the fruit but also the contributions of your ARS colleagues.

You can also view a short video on this research here: http://www.ars.usda.gov/is/video/asx/hawaii.asx

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

Dragon fruit.

Rambutan fruit.

Longan fruit.