# BARC e-Update



### Beltsville Agricultural Research Center

10300 Baltimore Avenue

Beltsville, MD 20705

Phone: 301.504.5193

Email: BA-Office@ba.ars.usda.gov

## July 2005

**BARC** is part of the USDA's Agricultural Research Service and encompasses programs at the Beltsville Agricultural Research Center; the U.S. National Arboretum in Washington, D.C.; and worksites in Chatsworth, New Jersey; Presque Isle, Maine; and McMinnville, Tennessee. BARC is the largest and most diversified agricultural research complex in the world. BARC's record of accomplishments and its ongoing programs have made it a world leader in agricultural research.

### Community Interest



# in the Spotlight!

# BARC EMPLOYEES RECEIVE PRESIDENT'S VOLUNTEER SERVICE AWARD

In June, a group of BARC employees, Agricultural Research Service Information Staff personnel, BARC retirees, and University of Maryland staff received the President's Volunteer Service Award for their innovative classroom presentations on nutrition at the



Beltsville Elementary School. All students in grades 1 through 6 participated in the program where they received up-to-date information on nutrition and healthy lifestyles. This activity was one of many conducted with the school and BARC under a Partners in Education program which started in the 1980's.

This Award is given to individuals, families, and groups that have demonstrated outstanding volunteer service and civic participation over the course of a 12-month period. For more information on recognizing and honoring volunteers and on earning this award, visit <a href="https://www.presidentialserviceawards.com">www.presidentialserviceawards.com</a>.



#### HISTORICAL NOTE

When eating blueberries this month, think of BARC! The first blueberry breeding program in the world was begun in 1909 by Frederick Coville. His first cultivar was named *Pioneer* because it was the first blueberry developed through artificial hybridization. Nearly all of the blueberries we eat today are either a BARC cultivar, such as *Duke* or *Bluecrop*, or have a BARC cultivar in their background.

# BARC SCIENTIST MOST CITED IN ANIMAL HEALTH AND VETERINARY MEDICINE

Science Watch (vol. 16, May/June 2005) recently reported on the top contributors to research in animal health and veterinary medicine from 1994-2004. USDA was the top-ranked institution world-wide in terms of citations to published papers. Citation of a scientist's work by other researchers is one of the most common metrics for impact of their work. The number-one most cited scientist in the world in animal health and veterinary medicine was BARC's Dr. JP Dubey. Dr. Dubey's work has been cited by other scientists a total of 2,264 times in the past decade. The next most cited author was cited 1,693 times. Visit Science Watch at www.sciencewatch.com.

NJÁ

#### NNFA AWARD RECIPIENT

**Dr. Richard A. Anderson**, Nutrient Requirements and Functions Laboratory, Beltsville Human Nutrition Research Center,

has been awarded the National Nutritional Foods Association's Burton Kallman Scientific Award – an honor bestowed upon individuals who have made outstanding contributions to the advancement of scientific research in the field of human nutrition. Dr. Anderson is being recognized for his long-term pioneering work in the field of nutrition and more specifically, his work with diabetes research. Check out <a href="https://www.nnfa.org">www.nnfa.org</a>.

The ARS National Visitor Center, located on Powder Mill Road in Beltsville, offers guided tours of BARC. Reservations are required for tours and can be made by calling the Visitor Center at 301.504.9403.

Visit the National Visitor Center homepage at www.ars.usda.gov/is/nvc/index.html

### On the Research Side



**Dr. Phyllis Johnson,** Director of BARC, has been appointed Co-Chair of an Interagency Working Group on Collections by the White House Office of Science and Technology Policy. This group will develop guidance and priorities for managing Federal collections of

natural history specimens and other collections. BARC has invaluable national collections of insects, nematodes, fungi, animal parasites and rhizobia that are the basis for systematics research. Research with these collections supports homeland security, international trade and phytosanitary concerns, biocontrol programs, and prevention of entry of invasive species.

#### LYME DISEASE CONTROL

Ticks that may be infected with the Lyme disease spirochete or other pathogens occur in wooded habitats throughout BARC. White-tailed deer are primary hosts of deer ticks and lone star ticks, species of particular concern as threats to humans. Operation of '4-poster' stations that passively treat deer with an insecticide as they feed on corn bait will be resumed in areas of likely human-tick contact at BARC. Where '4-posters' were operated experimentally on BARC-East from 1998-2002, deer tick numbers were reduced by 75%, and lone star ticks by 95%.



For more information on personal protection and on detecting lyme disease, visit <a href="http://www.anri.barc.usda.gov/pbel/lyme">http://www.anri.barc.usda.gov/pbel/lyme</a> prevention.asp.

'4-Poster' Deer Self-Treatment Tick Control Device

#### BARC and THE BAY

On July 13, Scientists from our Crop Systems & Global Change Laboratory discussed the potential use of crop simulation models, developed at BARC, to better predict effects of agricultural best management practices on reducing nitrogen and phosphorous impacts on water quality at a Chesapeake Bay Program Nutrient Subcommittee meeting; the meeting was hosted by BARC.



**Dr. John Teasdale**, Research Leader of the Sustainable Agricultural Systems Laboratory, is featured in the July 15th *The New Farm*® newsletter of the Rodale Institute. The article focuses on Teasdale's work with weed management strategies, particularly cover crops, and touches on some BARC history as well as the future of BARC, such as movements toward organic



farming. The Rodale Institute®, a global leader in regenerative agriculture, is devoted to innovative agriculture research, outreach, and training through *The New Farm*® programs. Find the entire article at

http://www.newfarm.org/depts/weeds/features/0705/teasdale.shtml.

# TRICHINELLA IN PORK – INTERAGENCY TRAINING The parasite *Trichinella spiralis* if present in livestock can be

passed to humans and cause disease. Members of our Animal Parasitic Diseases Laboratory provide training to other federal agencies on the identification of infected products. The most recent training was provided for the USDA Agricultural Marketing Service certification of packing plant analysts for the identification of *Trichinella* larvae in meat destined for export. This training program has been in existence since 1992.

### Mark Your Calendar!



### September 9: POULTRY FACILITY GROUNDBREAKING

The groundbreaking of BARC's new poultry facility will be held on September 9<sup>th</sup>. The 28,100 square foot facility will be both a production and hatchery poultry building. It will be constructed near the intersection of Powder Mill Road and Poultry Road. Poultry research at BARC supports the poultry industry in the Delmarva and nationwide.

#### October 5: CHESAPEAKE BAY DAY

On October 5<sup>th</sup>, at Chesapeake Bay Day, ARS/BARC will sign a memorandum of understanding with the U.S. Environmental Protection Agency's Chesapeake Bay Program (CBP), and the Mid-Atlantic Regional Water Quality Program of the Land Grant Universities. The goal is to strengthen collaborative cooperation to fulfill the Keystone Commitments of the Chesapeake 2000 agreement of CBP. The event will highlight current BARC research and innovation impacting the Bay's health. CBP is an Annapolis, MD-based organization with membership from Maryland; Pennsylvania; Virginia; Washington, DC; the Chesapeake Bay Commission; and the EPA.

#### USDA Non-Discrimination Statement

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). USDA is an equal opportunity provider and employer.

