

BARC e-Update



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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.

Blowing Our Own Horn!



RETIRED BARC SCIENTIST INDUCTED INTO ARS SCIENCE HALL OF FAME



Dr. Vernon Pursel, retired BARC Research Leader, has been named as a 2006 inductee to the ARS Science Hall of Fame. Pursel retired from ARS in 2002 but continues to collaborate with scientists at BARC's Biotechnology and Germplasm Laboratory. During his 38 years of service, Pursel has focused on developing new reproductive biotechnologies to accelerate the rate of genetic progress in farm animals. These new technologies have improved the efficiency of producing animal protein for food. Pursel's awards include being named a Fellow of the American Society of Animal Science (ASAS) in 2004 and receiving the ASAS Award in Animal Physiology and Endocrinology in 1995, the USDA Unit Award for Distinguished Service in 1989, and the USDA Superior Service Award in 1977. Vist the Hall of Fame at www.ars.usda.gov/careers/hof.

BARC SCIENTIST NAMED HERBERT L. ROTHBART OUTSTANDING EARLY CAREER RESEARCH SCIENTIST

Dr. Douglas Bannerman, Microbiologist with BARC's Bovine Functional Genomics Laboratory, has been named the 2006 Herbert L. Rothbart Outstanding Early Career Research Scientist. His research spans both basic and applied studies of bovine host immune defense mechanisms, and his contributions have been outstanding. His research is widely acclaimed and referenced by other researchers. The thrust of Dr. Bannerman's research program is to enhance the quality and output of milk produced by dairy cattle by devising innovative strategies to reduce mastitis. The purpose of the ARS Scientist of the Year Program is to annually recognize the creative efforts, scientific leadership, and the major research accomplishments of ARS research scientists.



Community Interest...

BARC EMPLOYEES PROVIDE TECHNOLOGY TRAINING TO AREA HS STUDENTS



BARC supported High School/High Tech of United Cerebral Palsy of Prince George's and Montgomery Counties by providing training to two high school students in the Summer Work Experience Program. The students were supervised by BARC's Safety and Health Manager, **Mr. David Prevar**, who, with Safety and Health Specialist, **Ms. Mary Winkler**, identified projects that provided technology training opportunities. The students completed several assignments in database creation, including critical equipment lists, and scanning of all BARC building plans into computer files for mobile use. The purpose of High School/High Tech is to provide youths with disabilities realistic exposure to technology-related fields to test their interests and abilities. This gives them an advantage when graduating to post-secondary education and training, and entering the workforce. For more information on this and other similar programs, you may contact **Ms. Jenny Allen**, BARC's Outreach Coordinator, at Jenny.Allen@ars.usda.gov or 301.504.6507.

BARC TO PROVIDE COMPOSTING SERVICES FOR UPCOMING DC GREEN FESTIVAL



BARC will be spearheading the composting waste management for the October 14th-15th DC Green Festival. **Dr. Patricia Millner**, Microbiologist with the Soil Microbial Systems Laboratory, will be overseeing the composting of the festival's hand-sorted biobased foodware for this 2-day event. This opportunity fits well with BARC's on-going evaluation of the compostability of biobased products. In addition to providing composting services, BARC will also have an exhibit booth! The Green Festival will be held at the DC Convention Center, and the improved floor plan includes a Green Kid's Zone with a Rolling Rainforest, and 3 Great Pavilions: Fair Trade, Natural Home, and Green Investing. Last year there were over 20,000 attendees at this annual DC event. Visit www.GreenFestivals.com for current information, press releases, and speaker details.



DEPLOYED WARFIGHTER PROTECTION PROGRAM

The Deployed Warfighter Protection program is a joint USDA-DoD initiative to develop novel methods to protect U.S. military personnel deployed abroad from threats posed by insects and ticks that transmit disease-causing pathogens. DoD has sought the expertise of BARC's Chemicals Affecting Insect Behavior Laboratory (CAIBL) to develop new chemistries and modify existing chemistries for use as insect repellents. BARC's efforts are product-oriented, ultimately producing on-the-shelf solutions for the military through cooperation with industry, academia, and other government agencies. Products developed through this effort will also be available to the general public. Blood-sucking arthropods such as mosquitoes, sand flies, body lice, fleas, ticks and mites are responsible for transmitting a wide variety of debilitating disease-causing agents. Disease prevention, overseas, usually depends upon individuals either avoiding areas of risk, planning travel to avoid seasons of high vector activity and/or applying topical skin repellents. In the U.S., the use of products to repel or kill blood-sucking arthropods has taken on a recent urgency, primarily due to the emergence of tick-transmitted Lyme disease and the West Nile virus, transmitted by several species of mosquitoes. For more information, contact **Dr. Mark Feldlaufer** at feldlaum@ba.ars.usda.gov or 301.504.5413.

SWINE 2006 STUDY



The USDA's National Animal Health Monitoring System (NAHMS) conducts national studies on the health and management of America's domestic livestock populations. These studies are designed to meet the information needs of the industries, as identified by people working within these industries. The upcoming **Swine 2006** study will be NAHMS' fourth national study of the U.S. swine industry. Seventeen states will participate in the Swine 2006 study, and the objectives of the study include: describing swine management practices used during the gestation, farrowing, nursery, and grower/finisher phases of production; determining the prevalence and risk factors for a variety of pathogens found in nursery and grower/finisher pigs; examining vaccination and antimicrobial-use practices; and providing an overview of changes in U.S. swine management and health from 1990 through 2006. Scientists at BARC's Animal Parasitic Diseases Laboratory (APDL) will participate in NAHMS '06 by determining the prevalence and risk factors for 2 food borne pathogens, *Toxoplasma gondii* and *Trichinella spiralis*, in surveyed swine in collaboration with APHIS' Centers for Epidemiology and Animal Health. The survey is scheduled to be completed in March, 2007. For more information, contact APDL's **Dr. Dolores Hill** at dhill@anri.barc.usda.gov.

Mark Your Calendar!

WHAT'S HAPPENING IN BEAVERDAM CREEK?

Come and find out about the creek flowing through BARC's campus! A Water Quality Monitoring Informational Forum is being presented by the Beaverdam Creek Watershed Watch Group (BCWWG), a local volunteer organization. The forum will include presentations by scientists from different organizations who have studied Beaverdam Creek, including **Dr. Greg McCarty** of BARC's Hydrology and Remote Sensing Laboratory. There will also be a panel discussion with the presenters and audience to discuss what parameters BCWWG should monitor as part of its newly forming Water Quality Monitoring Program. All are welcome to attend the forum on **Saturday, Sept. 30 from 9:30 a.m. – 1:30 p.m.** at the Greenbelt Community Center, Room 202. Space is limited; please call Susan Barnett for reservations at 301.474.7465. Additional information can be found at www.beaverdamcreek.org.



BARC BIRD WALK

An experienced bird watcher, **Dr. Michel Cavigelli** of BARC's Sustainable Agricultural Systems Laboratory, will be leading a Bird Walk on **Sunday, Oct. 1 from 7 a.m. – 10 a.m.** This walk has been organized by the Beaverdam Creek Watershed Watch Group. Details can be found at www.beaverdamcreek.org or by calling 301.504.8327 or 301.614.0691.

Bald Eagle photo courtesy of Doug Bolt



59TH ANNUAL ORCHID SHOW AND SALE

At the U.S. National Arboretum, The National Capital Orchid Society (NCOS) will present its 59th Annual Orchid Show with thousands of blooming orchid plants, a judged orchid art exhibit, and a well-stocked sales tent. Lecturers will school visitors on the art and science of keeping orchids.



Sale: October 7, 9 a.m. – 6:30 p.m.

Exhibit: October 7, 10 a.m. – 6:30 p.m.

Sale & Exhibit: October 8, 10 a.m. – 5 p.m.

Sale & Exhibit: October 9, 10 a.m. – 3 p.m.

For more information or directions to the Arboretum, please visit www.usna.usda.gov.

2006 CHINESE MOON FESTIVAL U.S. NATIONAL ARBORETUM



Banquet & Moon Viewing: October 7, 5:00 p.m. – 9:30 p.m. Attend a Chinese banquet, take special tram tours of the arboretum, enjoy performances of Chinese music and dance, and partake of moon cakes and tea as you view the rising moon. **Fee Applies. Registration required.**

Arts Demonstrations & Workshops: October 14 & 15 Join our special guests from the People's Republic of China for two days of demonstrations and children's workshops in a variety of Chinese arts and crafts, including paper cutting, paper folding, calligraphy, flower arranging, and penjing. Artisans from the city of Linyi, Shandong Province, and the Shanghai Botanical Garden present millennia-old arts and crafts. **Free. See a schedule of events and register.**

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