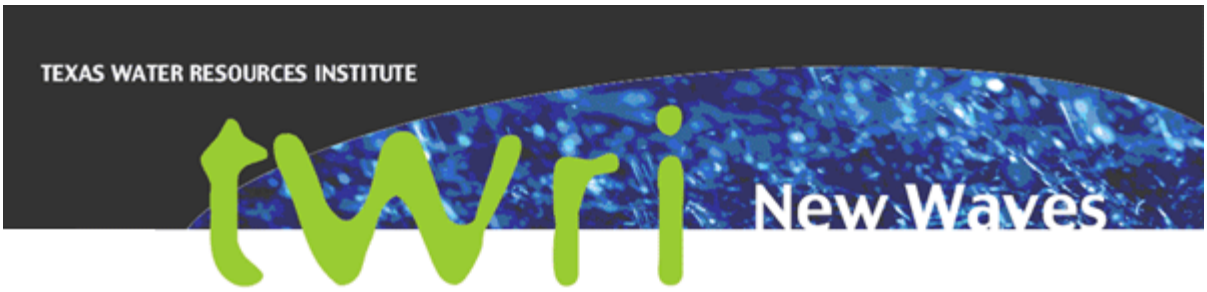

Breaking news about water resources research and education at Texas universities

September 25, 2006

Trinity River Basin initiative announced

Gov. Rick Perry announced recently the initiation of a Trinity River Basin environmental restoration project to improve the river's ecosystem and water quality and asked two institutes with The Texas A&M University System to serve as the lead the project.

The Institute for Renewable Natural Resources (IRNR), headed by **Dr. Neal Wilkins**, will facilitate environmental restoration projects in rural areas, with emphasis on improving wildlife habitats, fisheries and recreational opportunities and work closely with the Trinity Basin Conservation Foundation, a group of local landowners, conservationists, and parks and wildlife advocates.

The Texas Water Resources Institute (TWRI), headed by **Dr. Allan Jones**, will serve as catalyst for projects in urban areas, with emphasis on water conservation, water quality and stormwater management.

"This initiative will bring together the talents and knowledge of many organizations and individuals to improve and better manage rural and urban streams, reservoirs and watersheds; to enhance wildlife habitat; and to expand ecotourism opportunities in the Trinity Basin," Jones said.

The Trinity River Basin connects two major metropolitan areas; it stretches from the Dallas-Fort Worth Metroplex to Houston. The river is in close proximity to 8.9 million residents and provides water to 40 percent of the state's population.

Compost publications available

The **Dairy Compost Utilization Project**, a joint project of Texas Water Resources Institute and Texas Cooperative Extension, has developed updated publications about the proper use of dairy manure compost in various applications.

The publications include: **Erosion Control and Revegetation**, **Sports Fields Fact Sheet**, **Urban Compost Fact Sheet**, **Establishing New Landscapes Fact Sheet**, **Economics of Dairy Manure Compost Fact Sheet**, **Compost Application Fact Sheet**, **Corn Production Fact Sheet**, **Forage Production Fact Sheet**, **and Specialty Forages Fact Sheet**

For more information about the project, visit http://compost.tamu.edu/

Project seeks proposals for new technologies for waste pollution control

Texas Cooperative Extension and the Texas Water Resources Institute have issued a Request for Proposals (RFPs) for the project, "*Demonstrate and Evaluate the Use of Technologies to Reduce Animal Waste Pollution*." Proposals are requested from technology providers for technologies to be tested and demonstrated in the Bosque and Leon River Watersheds. The proposals are due no later than November 15, 2006.

The project, funded by the U. S. EPA Region 6 and administered by the Texas State Soil and Water Conservation Board, provides for testing of new technologies designed for reducing water pollution associated with animal production systems, principally dairies. This project is strictly to evaluate the ability of new technologies to reduce total phosphorus by at least 50 percent in liquid dairy manure effluent in an environmentally sound manner that does not adversely impact the existing waste management system.

Additional proposal information may be obtained at http://twri.tamu.edu/projects/NewTechnologies/RFP_2006.pdf. For more information, contact **Dr. S. Mukhtar**, Biological & Agricultural Engineering Department, Texas A&M University, 979.458.1019 (phone) mukhtar@tamu.edu.

Saltcedar beetles successfully introduced near Big Spring

Saltcedar beetles introduced to help control the water-consuming, invasive saltcedar tree along the Upper Colorado River have defoliated 18 acres of a saltcedar stand, an increase in defoliation of 10 times each year for 3 years, according to a researcher involved in the project.

"We expect the beetles to begin actually killing trees in 2 more years but, in the meantime, the damaged trees are so small that they use little water and allow the grass to return," said **Dr. Jack DeLoach,** entomologist with the U. S. Department of Agriculture-Agriculture Research Service (USDA-ARS). He said researchers expect this rate of increase to continue for several years.

DeLoach said this increase was a remarkable early successful control. "We expect that we can provide the beetles to landowners to control saltcedar on their own lands beginning next year," DeLoach said.

Saltcedar was introduced to the western United States in the 1800s from central Asia as an ornamental tree and planted along riverbanks for erosion control. Without a natural predator, the tree soon out-competed native plants and has now infested an estimated 500,000 acres of Texas streams and riverbanks. The beetles are used as a companion to other methods of saltcedar control, including herbicide treatment and controlled burning.

DeLoach, **Dr. Allen Knutson**, an entomologist at Texas Agricultural Research and Extension Center at Dallas and other scientists from Texas Agricultural Experiment Station, Texas Cooperative Extension and USDA-ARS have worked to introduce saltcedar beetles from Greece to research sites near Big Spring. In 2004, the researchers released 38 adult beetles from Crete, Greece onto saltcedar trees. "They reproduced to about 500 by mid-July and defoliated 2 small trees, when we released the remaining 500 beetles from the cage with them," DeLoach said.

They over wintered well in the open underneath the saltcedar trees, he said, and by September 2005 these beetles had increased to an estimated 200,000 and defoliated 210 trees in 1.6 acres of the saltcedar stand. By September 2006 they had defoliated 18 acres.

"We expect biological control to provide effective, safe, inexpensive, permanent and environmentally friendly control of saltcedar in areas where the beetles are adapted to the habitat and climate" he said. "We have tested these beetles for over 10 years and demonstrated that they are safe. They damage only saltcedars (in the plant genus Tamarix) and no species of Tamarix are native in either North or South America."

Groundwater seminars scheduled

Texas A&M University's departments of Biological and Agricultural Engineering, Civil Engineering and Water Management and Hydrologic Sciences will be hosting the following Groundwater Management Seminars in October on Wednesdays from 4 to 5 p.m. in room 110 of the Civil Engineering Building:

Dr. Robert Bowman, professor of Earth & Environmental Sciences at New Mexico Tech University, will speak on "Surface/Groundwater Interactions in the Semiarid Rio Grande Watershed, New Mexico" on Oct. 4.

Dr. Geary Schindel, aquifer science program manager for the Edwards Aquifer, will present "Surface/Groundwater Interactions in the Edwards Aquifer of Texas Authority" on Oct. 11.

Dr. Tim Kramer, assistant professor in Texas A&M's Department of Civil Engineering, will speak on "Treatment of Perchlorate in Groundwater" on Oct. 18.

Dr. David Maidment, University of Texas civil, architectural and environmental engineering professor, will talk on the "Application of an ArcGIS Groundwater Data Model" on Oct. 25.

EPA seeking teams of college students to research environmental challenges

The U.S. Environmental Protection Agency is seeking applicants for the agency's People, Prosperity and the Planet (P3) competition, which enables teams of college students to research, develop and design scientific and technical solutions for environmental challenges.

The selected teams will be invited to compete for the P3 Award in Washington, D.C. in 2008. The award allows for additional funding to further develop and implement their project.

Proposals must be received by Dec. 21, 2006. For application information and more about the P3 competition, visit, http://www.epa.gov/P3 .

SWAT course offered

The Spatial Sciences Laboratory will be conducting an Advanced SWAT course Oct. 17-19.

The Advanced SWAT course will cover sensitivity analysis, model calibration and uncertainty analysis. Participants will also be able to discuss individual model issues. Cost for this course is $500 per person or $300 per student. A one-on-one project support session with the director is an additional $100.

For registration forms or for more information on other training course, visit the Lab's Web site at http://ssl.tamu.edu or contact **Lesli Gomez** at (979) 862.7956.

Upcoming University Conferences

New Mexico Water Conference

The 51st Annual New Mexico Water Conference will be Oct. 3-4 at the Hotel Albuquerque at Old Town.

The conference will cover New Mexico's water quality and quantity issues, regulations and standards; challenges faced by small communities and agricultural communities; water quality programs and more.

Early registration forms and payment must be received before Aug. 31. Regular registration continues Sept. 1 through Sept. 26. For more information about the conference and the tour of the Albuquerque Water Treatment Plant, visit http://wrri.nmsu.edu .

New Mexico Drought Summit

New Mexico's 4th Annual Drought Summit will be Oct. 18 at the University of New Mexico's Continuing Education Center in Albuquerque.

The summit will focus on climate change and New Mexico's water resources and will feature Dr. Jonathan Overpeck, director of the Institute for the Study of Planet Earth at the University of Arizona; Dr. Dave Gutzler, professor at the University of New Mexico; and Jacques DuBois, chairman and CEO of Swiss Re. For more information, visit http://www.nmdrought.state.nm.us

International Conference on Water in Arid and Semiarid Lands

The International Conference on Water in Arid and Semiarid Lands will be on Nov. 15-17 at Texas Tech University.

Conference themes include information about soils, crops, and irrigation; water resources; water law and policy; and climate, ecology, remote sensing and GIS applications and more. For more information about the conference visit http://www.iaff.ttu.edu/home/icasals/conference/.

Charting the Course, a water planning and policy conference

"Charting the Course," a Texas water planning and policy development conference, is set for Nov. 15-17 at the State Capitol Extension in Austin.

The conference will feature symposia by the state's leading scientists and representatives from water resource management agencies focusing on how far the state has come in terms of water resource management and planning. It is sponsored by the River Systems Institute and co-sponsored by the Guadaulupe-Blanco River Authority, Texas Parks and Wildlife Department, Texas Water Resources Institute, and U.S. Geological Survey.

State Sen. Kip Averitt and **State Rep. Robert Puente** will speak. **Phil Wilson**, deputy chief of staff with Governor Perry's office and **Dr. Allan Jones**, Texas Water Resources Institute's director, will discuss the Trinity River Basin Environmental Restoration Initiative.

The conference will also highlight the development of the 2007 Texas Water Plan, the implications and obstacles to its implementation and how policy activities of the next legislative

session can provide a framework for overcoming these obstacles. More information is available at www.rivers.txstate.edu or contact chart.the.course@grandecom.net .

New Publications

The following new publications are available from the Texas Cooperative Extension bookstore at http://tcebookstore.org/

Best Management Practices for Conservation/Reduced Tillage, **Charles Abrameit, Charles Stichler and Mark L. McFarland**

Farming today requires producers to employ best management practices to be successful. Because of increased crop production costs, most farmers need to re-evaluate how they till and consider adopting reduced or conservation tillage practices. Authors explain the different tillage systems and report results of applying fundamental BMPs to their own crop trials at a farm in south central Texas.

Drinking Water Problems: Radionuclides, **Bruce J. Lesikar, Rebecca Melton , Michael Hare, Janie Hopkins and Monty Dozier**

Radionuclides in drinking water can cause serious health problems for people. This publication explains the sources of radionuclides in water, where high levels have been found in Texas, how they affect health and how to treat water to remove them.

On-Site Wastewater Treatment Systems: Responding to Power Outages and Floods, **Bruce J. Lesikar , Courtney O'Neill and David Smith**

People and the environment can be harmed if a home's on-site wastewater treatment system does not work properly after a flood or power outage. This publication explains the steps to take after such an event to get the system back into service.

Lawn Water Management, **James McAfee**

Water is a limited resource in Texas. This booklet informs the homeowner how to establish a water management program for a home lawn that both maintains a healthy sod and also conserves water. The publication discusses soil types, grass varieties, management practices and watering techniques.

Keep Your Lawn Alive During Drought, **James McAfee**

This booklet addresses ways a homeowner can maintain a healthy lawn during drought. It discusses water rationing and care of specific grass species.

If you would like your publication listed, please e-mail kwythe@tamu.edu with your information.

"News Waves," an email newsletter of Texas Water Resources Institute publishes timely information about water resources news, results of projects and programs, and new water-related research projects, publications, papers and faculty, at universities in Texas. If you have information for possible inclusion in "New Waves" please e-mail items to kwythe@tamu.edu or

979.845.1862 and include your contact information. All submissions may be edited for grammar and style.

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