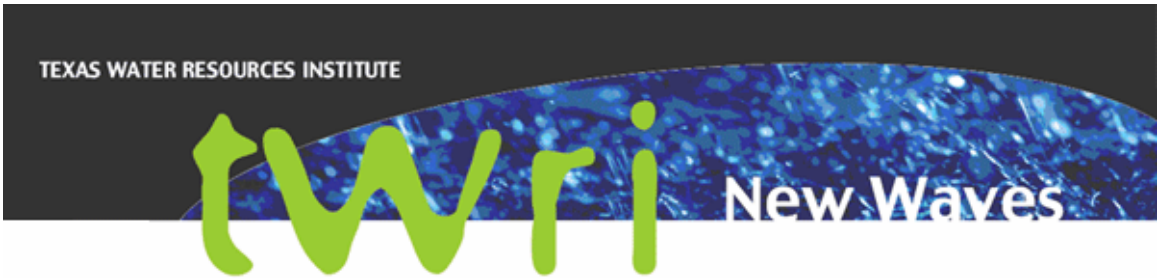

Breaking news about water resources research and education at Texas universities

Feb.13, 2006

1. Irrigation management program increases profits for San Patricio County farmers

A San Patricio County irrigation management program helped increase profits for 20 farmers in 2005. The program instigated to teach best management practices, according to Jeffrey Stapper, Extension agent for agriculture and natural resources in San Patricio County.

Stapper said the value of the program to farmers could be equated to an increase of $20 per acre of irrigated crops.

Stapper said the program established five irrigation research verification trials in 2005 to serve as models and teaching tools for best management practices, established variety tests on three plants to determine the best-suited varieties for local irrigation and implemented a cotton test and growth regulator study to evaluate possible yield enhancing practices for irrigation systems. The program, which involved the local Field Crops Committee, also held seminars and meetings.

"Best management practices used in the verification trials resulted in an average gross value of $161 per acre more than the fields of the county average," Stapper said.

Irrigation of crops in the western part of the coastal bend county has increased 50 percent in the last few years and generates more than $6.5 million annually, Stapper said.

2. Assessment of Buck Creek for bacteria impairment continuing

After 20 months of sampling at 13 sites on Buck Creek in the Texas Panhandle, research appears to confirm that certain segments of the creek may have elevated levels of bacteria, causing sporadic seasonal impairment, according to researchers at the Texas Agricultural Experiment Station (TAES) in Vernon.

This sampling and evaluation is part of the Buck Creek Water Quality Sampling/Assessment Project, a federal Clean Water Act section 319(h) grant funded by the Texas State Soil and Water Conservation Board (TSSWCB) and the Environmental Protection Agency. Texas Water Resources Institute (TWRI) and TAES-Vernon are conducting the project.

To continue reading the story, go to http://twri.tamu.edu/newsarticles.php?view=2006-02-13-03.

3. Student researches real-time runoff estimates for Texas watersheds

In an effort to predict surface runoff and flooding, a Texas A&M University graduate student and her advising professor are using the SWAT (Soil and Water Assessment Tool) model to simulate runoff on an hourly basis in Texas' watersheds.

Bakkiyalakshmi Palanisamy is a recipient of a Texas Water Resources Institute-managed grant funded by the U.S. Geological Survey. She compared the real-time stream flow measurements obtained from U.S.G.S. data to what she obtained from her simulation.

Results indicated that for hydrologic and water quality modeling, rainfall values from a dense rain gauge network should be used in lieu of widely distributed point rain gauge measurements across the study area.

To continue reading the story go to http://twri.tamu.edu/newsarticles.php?view=2006-02-13-02 . For more information on Palanisamy's research, visit "USGS Research Grants" at http://twri.tamu.edu .

4. Membrane/separations technology "Hands-On" course scheduled

Texas A&M's Separation Sciences Group at the Food Protein Research and Development Center is sponsoring the 16th annual Membrane & Separations Technology short course, April 2-6 in College Station.

"Fundamentals, New Developments, Applications and Pilot Plant Demonstrations" is designed for food, water, chemical, petroleum and environmental industry personnel.

Industry experts and researchers from across the United States and Germany will give lectures on the basic principles, system designs, case studies, membrane & separations equipment selection, and costs & economics of membrane and separations technologies.

To continue reading the story, go to http://twri.tamu.edu/newsarticles.php?view=2006-02-13-01

5. Fellowship Program Supports Graduate Research

The National Water Research Institute (NWRI) is offering fellowships up to $10,000 to master's and doctoral students who are conducting research related to water resources. Deadline for the 2006 fellowship applications is March 1. The institute will award the fellowships July 1.

Graduate research must pertain to NWRIs mission, which is "to create new sources of water through research and technology to protect the freshwater and marine environments."

The institute, located in Fountain Valley, Calif., is a non-profit organization dedicated to promoting and funding research in the fields of water science and technology.

For more information on the fellowships go to http://twri.tamu.edu/nwri_fellowship.php .

6. Lifetime Achievement Award Presented to Extension Economist

Dr. Steve Amosson received the Southern Agricultural Economics Association Lifetime Achievement Award at the organization's annual meeting Feb. 2. Amosson is a Regents Fellow and a professor and economist with Texas Cooperative Extension in Amarillo.

He is co-director of the national Master Marketer Program, director of the "Have Computer Will Travel" project and project leader of the High Plains Water Planning Team. He also has served as project director or principle investigator on more than 60 grants.

For the complete story, see the AgNews story at
http://agnews.tamu.edu/dailynews/stories/AGEC/Feb0206a.htm .

7. Entomologist Receives ARS's "Scientist of the Year" Award for Southern Plains

The USDA's Agricultural Research Service (ARS) recently recognized Dr. C. Jack DeLoach, an entomologist with ARSs Grassland Soil and Water Research Laboratory in Temple, as the "Area Senior Research Scientist of 2005" for the Southern Plains area. DeLoach was recognized for his "outstanding scientific investigation and program leadership in biological control of saltcedar and other invasive aquatic and rangeland weeds," according to a ARS news release.

New Publications/ Papers

"Water Resource Economics: The Analysis of Scarcity, Policies, and Projects," Ronald C. Griffin. Professor, Department of Agricultural Economics, Texas A&M; Cambridge, MA: MIT Press, 2006.

The book focuses on the scarcity of water quantity (rather than water quality). The author presents the economic theory of resource allocation, recognizing the peculiarities imposed by water, and expands the theory to encompass time-defined matters such as ground water depletion. He then discusses such subjects as institutional economics, water law, how economics is used in policy and cost-benefit analysis, the roles of water marketing and water pricing, demand and supply estimation, privatization, and modeling with demand and supply functions.
For more information on the book, go to
http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=10868

"Drinking Water Problems: Arsenic," Bruce J. Lesikar, Rebecca H. Melton, Extension Assistant, Texas Cooperative Extension; Michael F. Hare, Texas Department of Agriculture; Janie Hopkins, Texas Water Development Board; Monty C. Dozier, Texas Cooperative Extension.

High levels of arsenic in drinking water can poison and even kill people. This publication explains the symptoms of arsenic poisoning and common treatment methods for removing arsenic from your water supply. Download publication at http://tcebookstore.org/tmppdfs/8007577-2186.pdf

"Turf Irrigation and Nutrient Management," Guy Fipps, James McAfee, David Smith, Texas Cooperative Extension.

This manual is designed to serve as a reference guide for landscape professionals. It covers all aspects of irrigation and nutrient management of turfgrasses.
Available from the Extension bookstore at http://tcebookstore.org/pubinfo.cfm?pubid=2271

"Diagnosis and Management of Salinity Problems in Irrigated Pecan Productions," TWRI Technical Report 287, S. Miyamoto, Agricultural Research and Extension Center at El Paso

This short article outlines ways to diagnose and manage salt problems associated with irrigation. Download the report at http://twri.tamuedu/reports/2006/tr287.pdf or contact twri@tamu.edu for a paper copy.

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