TONES FROM THE TOOTH

Water resources in Arizona and the desert Southwest represent a critical area of management. In 1889 John Wesley Powell (the famous one-armed Civil War veteran that explored the Southwest and particularly the Colorado River through the Grand Canyon) made the prophetic statement: “ultimately the true value of the western territories will be measured in terms of acre-feet”. We have reached the point that John Wesley Powell foretold where water will govern development and success of communities in the west. To this end, I’ve always felt that the University of Arizona, CALS, and particularly the Soil, Water and Environmental Science Department should have an extension program directed in water resource management. Until very recently we have not been able to develop a program explicitly oriented toward water resource management.

A few years ago we had the opportunity to work with ISPE and the CALS Administration to develop an extension program in water resource management. We were able to gather the resources to initiate the position and we were very fortunate in being able to recruit Ms. Kathy Jacobs into our department in January 2004. Kathy joined our faculty following approximately 20 years experience working with the Arizona Department of Water Resources (ADWR). Her knowledge and expertise in water issues, garnered from her work with ADWR, proved to be extremely valuable. Kathy began immediately to develop an outstanding extension program in water resource management with the primary focus on bringing good science into the policy and decision-making process in Arizona and this region.

Recognizing the need for bringing good science and factual information into the water policy arena and the fact that we have an extensive amount of information currently available among our three universities in Arizona (UA, ASU, and NAU), Governor Janet Napolitano put forth a plan to develop a Virtual Water University. In this day and age and with the capacities that we have technologically, the Governor's office envisioned developing a state-wide water resource management entity that could collect and disseminate information relative to water-related issues from all three universities. This plan has continued to develop and has recently evolved into the Arizona Water Institute (AWI).

The first step in implementing the AWI was to find the appropriate person to serve as the Executive Director and to take the critical steps in developing this entity into a functional unit. Kathy Jacobs was recognized as the clear and distinct leader among the candidates that were under consideration for Executive Director for the AWI. Kathy was recently appointed as the Executive Director and has now assumed these professional responsibilities full-time.

This is an excellent opportunity for Kathy and a true honor for her to be recognized in this manner. Kathy faces a large and challenging task in developing the AWI. However, in working with Kathy, I have every bit of confidence that she is indeed the best person for this position and she will surely do an excellent job. Kathy will maintain her academic appointment with the UA in the SWES Department. Therefore, we will have the benefit of maintaining professional contact with Kathy through the Department and through her new position as Executive Director of the AWI. Please join me in congratulating Kathy on this outstanding opportunity and professional challenge.

Jeffrey C. Silvertooth, Department Head

FEATURED FACULTY

Katharine L. Jacobs,
Executive Director, Arizona Water Institute; Deputy Director of the National Science Foundation Center for Sustainability of semi-Arid Hydrology and Riparian Areas (SAHRA), UA
**SWES REPORT CARD**

**PUBLICATIONS:**


**PRESENTATIONS:**

Sylvia Franke was invited to speak and display a poster: “New developments in understanding the role of CusF in cus mediated copper resistance in E. coli”. GRC Metals in Biology, Four Point Sheraton, Ventura, CA.

Raina Maier was invited to present “The Dark Wet Microbial World of Kartchner Caverns” at Purdue University, March 6.


Kelley Riley presented “Assessment of the Microbial Water Quality of Individual and Small Systems in Arizona” at the Fifth Annual on-site Wastewater Conference, sponsored by the Arizona County Directors of Environmental Health Directors Association. The Conference was held in Laughlin, Nevada, February 1st and 2nd, 2006.

Sylvia Franke presented a seminar titled “Mechanisms of microbial copper and zinc homeostasis” at Skidmore College, Saratoga Springs, NY January 4, 2006.


Martin Yoklic also presented a poster titled "Residential Water Harvesting in Cold Climates: R&D at the Forest Products Laboratory (FPL)” at the USDA-CSREES Water Conference.

**DEPARTMENT NEWS:**

On February 9th through 12th the UA Soil Judging Team competed against Cal Poly and NMSU in the 2006 Southwest Regional Soil Judging Competition. This years contest was held in Las Cruces, NM and co-hosted by the University of Arizona and New Mexico State University. All team members participated and were successful. The **UA team took first place in the group judging competition and first place overall!!!** Currently the team is preparing for the 46th National Soil Judging Competition hosted by Cal Poly in California.

Individual Competition:

2nd David Watson
3rd Devin Gaugler
4th Raven Bolas
6th Christina Contreras
7th Edward Mitchell


Martin Yoklic, was invited to participate in a workshop on strengthening the connections between Land Grant institutions and the Federal Laboratories. The workshop was held at Oak Ridge National Laboratory on February 14-15, 2006.

GRANTS:


PLANET TALK FROM ERL
Ian Pepper

Halophytes, aquatic toxicology, aquaculture, water quality and water security were some of the topics included in a workshop for Tucson teachers sponsored by the University of Arizona's Water Quality Center. The WQC provided National Science Foundation funds for 25 teachers from nine Tucson high schools to participate in the Dec. 8 workshop titled, "Integrating Water Research with Classroom Instruction." Drs. Ed Glenn, David Walker, Kevin Fitzsimmons, and Ian Pepper engaged the teachers in learning about their research projects.

The workshop was a partnership of the UA Environmental Research Laboratory, the UA Water Resources Research Center's Arizona Project WET Program and Tucson Unified School District. The workshop included discussions and brainstorming activities to identify strategies to engage high school students in relevant water quality studies.

This semester Arizona Project WET CATTTS students are involving high school students in water related research in and outside the classroom. In some schools, students will be setting up aquaculture/hydroponic systems and rainwater harvesting systems. Students will have access to water quality testing kits available through the Arizona Project WET Program for in-class work thanks to National Science Foundation funding. The students will be working with high school students for the rest of the school year.

ANNOUNCEMENTS
Congratulations to Sylvia Franke, Post-Doc. in Chris Rensing’s Lab on accepting a position as Assistant Professor for Microbiology, in the department of Biology, at Skidmore College located in Saratoga Springs, NY. She begins her new position June 2006.

Mark Brusseau has been appointed as a member of the CALS Post Tenure Review Audit Committee representing the natural sciences. The Post Tenure Review Audit Committee is made up of seven elected faculty who serve three year terms. Each year, under the University guidelines for post tenure review, the committee conducts an audit of the evaluation process for 20 percent of CALS tenured faculty.

GRAD TIPS
Judi Ellwanger

The mission of the Graduate and Professional Student Council (GPSC) is to promote the academic, economic and social aims of graduate and professional students of the UA, to establish effective communication among graduate and professional students, and to facilitate communication within the UA and other organizations. For example, GPSC coordinates the Travel Grant program, which provides funding for students attending or presenting research at academic or professional conferences. Information is available at the GPSC website: http://www.gpsc.arizona.edu with the following subjects: About GPSC, Current Issues, GPSC Meetings, GPSC Elections, GPSC Week 2005 (April 4-8) and Travel Grants. Travel Grant information is also available in the SWES Office in Shantz 429.

UNDERGRAD TIPS
Robb Carlisle

For all SWES undergraduates who plan to graduate May 2006, please ensure you have completed your degree check requirements, by contacting Julie Adkins in Forbes, Rm. 201, telephone 621-0975, as early as now.
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<td>First day of Spring Break – NO SWES Dept. Seminar</td>
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<td>SWES Dept. Seminar – 3p @ Marley – Rm. 230 Barbara Blair, Ph.D. Student</td>
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<td>12th Annual Hunger Banquet @ 6:00 PM Tucson Room, SUMC</td>
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<td>Extension Professional Development Working Group will host a workshop to help enhance management skills. The workshop will be held on March 29 and 30 at the Grace Inn in Ahwatukee (Phoenix).</td>
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<td>UA Staff Advisory Council Presents “On Our Own Time” Staff Art Exhibit @ Student Union Gallery - Exhibit is Open to the Public</td>
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NEWSLETTER TEAM: Raina Maier, Ph.D. Editor Robb Carlisle Coordinator Brooke McCord Distributor Karen Josephson Webmaster

* For questions, comments, suggestions, or feedback contact Robb Carlisle at 621-1646 or carlisle@ag.arizona.edu