TONES FROM THE TOOTH

As the global, national, state, and local economies struggle through the recent downturns, we see the results in many facets of our daily lives and the impacts are very real at the university level as well. The results of these economic problems are manifest in many forms of change, often quite difficult. We know the realities of this situation through the significant reductions in the state allocations to our university and departmental budgets and what that means in terms of the loss of jobs (positions/people) and operational funds to support our education (instruction and extension) and research objectives. In addition, the prospects in the near future (1-5 years) suggest that these changes will continue.

The times ahead of us offer significant challenges in terms of how we manage our programs in the face of continual reductions of State support. We are being challenged on many fronts through this process and we must identify priority areas where we need to focus our resources to protect and enhance the excellent quality we have for future development. This means it is critical that we understand where we are going and what our long-term objectives are. This is strategic planning at its very essence.

We need to be clear and focused on the future direction of the SWES Department (and all facets of this university) so that we can make the short-term decisions in line with our long-term strategic objectives. We have identified two broad areas of strength and focus in the SWES Department: 1) critical zone science and 2) water quality. Within this context we need to address our strategic objectives more specifically, clearly and vigorously. We need to identify the essential elements necessary to address our educational and research goals.

The circumstances require us to be realistic about the harsh realities ahead of us, step up to the rigors of developing a focused strategic plan, and prepare ourselves to implement it in a step-wise fashion as we are required to do so. In the weeks ahead we will work on this process in the SWES Department.

Jeffrey C. Silvertooth, Department Head

DEPARTMENT NEWS:

Jeff Silvertooth has accepted an invitation to be a Consulting Editor for Farming Outlook, a quarterly educational magazine on policy and developments of progressive agriculture.

Congratulations to Ryan Sinclair (postdoc - Dr. Gerba) who accepted an Assistant Professor position in the Public Health Program at Loma Linda University in Southern California.

Chris Rensing has accepted an invitation to be on the Editorial Advisory Board for Molecular Microbiology, the highest ranked journal for primary publications in Microbiology.

The book “The Blue Death” traces the history of waterborne disease from John Snow in England in the 1850’s to the present. One chapter describes how Chuck Gerba, Chuck Sterling and Joan Rose of the University of Arizona help solve the mystery of waterborne Cryptosporidium, which caused the largest outbreak of waterborne disease in U. S. history in Milwaukee in 1993.

A section in the book “Slow Death by Rubber Duck” discusses the work of Chuck Gerba and why we need to reinvent hygiene for the 21st Century.


Raina Maier served on the Organizing Committee for the 2009 Superfund Research Program Annual Meeting, Nov 2-5.

Raina Maier served on the External Advisory Board to review the UC San Diego Superfund Research Program, Dec. 7.

SWES CLUB NEWS:

Last year SWES Club had 5 new members in the whole year. And now we get about 5 new members every week. There are now 50+ members. We are now one of the largest environmental clubs, second only to ASUA Sustainability. The SWES Club has an intramural Co-rec soccer team. The season started last week. We are currently 1-1. Our team is composed of some pretty tall people so our name is... Midget Kickers. Granted probably not the most politically correct, but fitting.

We just completed our Intramural Co-Rec Inner Tube Water Polo season. SWES Club was undefeated going into the semifinals. Unfortunately, half the members had to attend conferences out of Tucson, so we were unable to compete and had to forfeit.

Last week SWES Club competed in the Club Olympics. Our crowning achievement was beating the UA Rugby team in Mud Tug O’ War! Granted we had 8 guys from the UA men’s swim team and some members from Elevation Snow and Ski Club... But a win for SWES Club none the less!

As to other activities – SWES Club just received a $1000 grant from the CALS Alumni to do water harvesting at an elementary school called Lineweaver Elementary. We will also be developing an interactive curriculum to teach special needs kids the hydrological cycle and water harvesting. This is done with the intent of creating an awareness of our Arizona’s water issues and having an impact upon a group of kids that are typically under focused.

SWES Club in conjunction with PARASOL is submitting two grants this week for a total of $13,000. The Pearson Sustainability Awards ($3,000) grant money would go towards developing a completely self-sustaining and maintaining water harvesting system at the Visitors Center. Right now there is a active water harvesting system at the UA visitors Center (uses a cistern to store water for future use – irrigation). However, it requires the UA gardening crew to come out to open and close the valve to irrigate the plants. We will be installing soil sensors to detect whether the soil has adequate moisture. If not then this will be relayed to controller that will open and close the valve attached to the cistern.

The other grant is the USGS 104b grant ($10,000), which will go towards doing various water harvesting projects on the UA campus, some signage for past completed projects, and further developing the project at Lineweaver Elementary School.

SWES Club is having trips coming very soon. This weekend we will be going to Cholla Bay, Rocky Point, Mexico to do the Annual Cholla Bay Clean-Up. This is an event we do every year where we clean-up all the garbage on Cholla Bay beach and stay in vacation homes. The following weekend we will be having a camping trip to Peppersauce Cavern, which is a public cave approx. 2 hrs north of UA. We clean up the inside the cave and pick up garbage in the surrounding area. This is a public site with no one to maintain it.

SWES Club has now had two very successful guest speaker events – speakers from the NRCS (Natural Resource Conservation Society) and SCA (Student Conservation Association), who shared internship opportunities with our members.

SWES REPORT CARD:

GRANTS:


C. Rensing (P.I.), Redox-mediated Copper Surface Killing of Bacteria and Yeasts. International Copper Association. 2009. $65,000.

M. Tuller and J. Walworth, Novel Gradient-Based and Surface Chamber Techniques for Monitoring Regulated and Greenhouse Gas Emissions from Animal Feeding Operations. CSREES AFRI Air Quality Program, $281,275 (this is the SWES portion of a joint $599,880 grant with S.B. Jones and R. Miller from Utah State University).


PUBLICATIONS:


**PRESENTATIONS:**

The following were presented at the Geological Society of America National Meeting. Portland, OR, Oct. 18–21


The following were presented at the ASACSSA-SSSA International. Annual Meeting, Pittsburgh, PA, Nov. 1-5.


Pepper, I. Soils: A Public Health Threat or Savior?


The following were presented at the 2009 Annual NIEHS Superfund Research Program Mtg., New York NY, Nov. 2-5.

Hayes, S., R.M. Maier, and J. Chorover. Toxic dust: Studying lead speciation in desert mine tailings to assess health risk.


Ramirez, M.D., L. Butler, R.M. Maier, E. Betterton, and A.J. Gandolfi. Creating partnerships with agencies to improve cleanup at the Iron King Mine and Humboldt Smelter Superfund site, Humboldt, Arizona

The following were presented at the 6th International Phytotechnology Conference, St. Louis, Missouri. Dec. 2-4.


American Chemical Society, 65th Southwest Regional Meeting. El Paso, TX Nov. 5.


Maier, R.M. Microbial diversity in Kartchner Caverns. 10th Anniversary Celebration of Kartchner Caverns State Park, Benson, AZ, Nov. 7.


Silvetoooth, J.C. Recuperación de suelos y/o sustratos afectados por factores inductores de estrés en los cultivos y Efectos de la fertilización sobre el medio ambiente y la calidad de los alimentos and Nueve técnicas de Laboratorio para determinar el estatus nutricional en plantas. Simposio Internacional Nutrición Vegetal. Guadalajara, Jalisco, México, Oct. 6-9.

