



University of Nevada, Reno  
Statewide • Worldwide



# AquaClara

A Publication of the Graduate Program of Hydrologic Sciences

Volume 17, Issue 2

Spring 2008

## Inside this issue:

|                       |     |
|-----------------------|-----|
| Directors Corner      | 2-3 |
| Student News          | 4-5 |
| News and Publications | 6-7 |

## First Recruitment Fair Weekend... Showing Prospective Students what UNR is all about!

Written by Dr. Greg Pohl

March marked the success of the department's first Recruitment Fair. Students traveled from all across the county to attend the event. With 15 new students joining the Program this fall, I think everyone will agree that the fair was a great success.

This event would not have been achievable without the enthusiastic participation of faculty and students. I would like to say, "thank you" to all those who participated. I would especially like to thank Shannon Archer who organized the entire weekend. The event would not have been possible without all of her hard work.

Most of the students arrived on Thursday and stayed with our current students who graciously volunteered to share

their homes for the weekend. Interaction with existing students is an important component of the recruitment process and I thank all of those students who provided housing.

Beginning early Friday morning, the students toured the facilities at the Desert Research Institute (DRI). The tour began with Paul Verburg guiding the students through the EcoCell laboratory. Next, Joe McConnell introduced everyone to his ice core laboratory. The final stop on the tour was the CAVE, a three-dimensional visualization center. Following the tour, the students met with a number of DRI faculty to discuss potential research opportunities. After their visit to DRI, the students went down to UNR to have lunch in the "Joe" (Joe Crowley Student Union).

(Continued on page 3)

## SAIWI 2008 African Dinner: Bringing the Reno Community Together!



Over 200 people enjoyed themselves at the 2008 African Dinner!!

The African Dinner is the largest fundraiser of the Year for the Student Association for International Water Issues. Each year, SAIWI partners with International Development Missions (IDM) to put

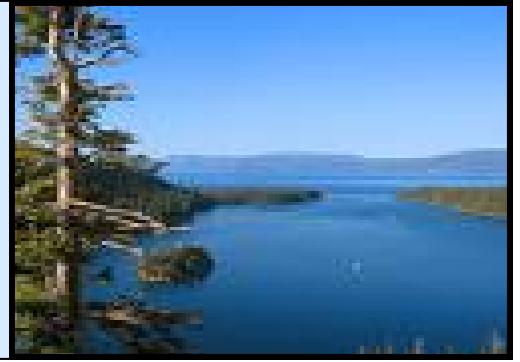
on an evening of traditional African food, entertainment, and a Silent Auction. Proceeds from the event go to fund student trips to developing countries for water aid work. In 2008 SAIWI funded trips to Ghana in East Africa and the Navajo Nation Reservation in the Southwestern United States. Each trip is

a rewarding experience to the education of individual students and allows students to give back to those in need using skills learned in the classroom.

The African Dinner was first held in in February 2004 and was attended by approximately 100 people. This year, to mark the

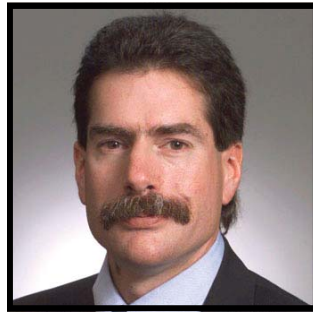
(Continued on page 5)

# Director(s) Corner



## End of the Year Wrap-Up

Written by Dr. J.J. Warwick



Director Dr. John Warwick

The academic year has gone by even more quickly than I had imagined and yet our program has accomplished much due to the active involvement of our faculty and students. Specifically, we considered carefully the future reporting situation for our program, reinvigorated our recruiting efforts which will result in a larger enrollment next fall, and began an important dialog regarding the continued evolution of our program to perhaps becoming the first statewide program in Nevada. Correctly this latter issue will need constructive thought and testing that will begin hopefully in earnest next year. The important point of any change is to ensure that the future quality of our program will improve as a result.

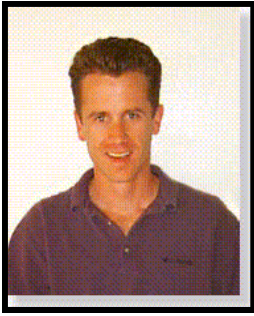
It has been a genuine pleasure for me this year to serve our students and faculty and to serve with Dr. Greg Pohll as Associate Director. I was therefore very pleased that Dr. Pohll was inspired to consider continued service as our future Director. Our open voting process this spring involving all faculty and students demonstrated a true commitment to the program by a large response and a considerable level of appreciation for Dr. Pohll's prior service and trust in his future leadership. I share in the voice of our faculty and students, knowing that Dr. Pohll will be an outstanding Director bringing new ideas and energy to our program.

Speaking of the future, it is time for me at least in writing to "say my farewells" as Interim Director. My last day of formal service will be June 30, 2008. Many faculty and students will likely be in the field or otherwise engaged in their research activities at that time. For me the satisfaction of this past year has been, as always, service. I have genuinely enjoyed the opportunity to re-engage with long-time colleagues on campus. Most importantly, it has been both rewarding and rejuvenating to interact with our outstanding student body. The continued involvement of our students and faculty, under the leadership of Dr. Pohll, will most certainly insure a very bright future for our program!



**"The continued involvement of our students and faculty, under the leadership of Dr. Pohll, will most certainly insure a very bright future for our program!"**

# Recruitment Weekend



(Continued from front cover)

Associate Director  
Dr. Greg Pohll

After lunch, the students went on a guided tour of the University. The highlight of the tour was the Keck Mineral Museum located in the Mackay School of Mines Building. The students were mesmerized by the large collection of minerals, ores, and fossil specimens.

At the conclusion of the UNR tour, the students dispersed to meet with UNR faculty. This was quite a logistical feat given that faculty are located across the University campus.

Dr Adrian Bejan gave an excellent lecture on the Constructal Law of Design in Nature. The student chapter of the American Water Resources Association did an excellent job preparing the sub sandwiches and refreshments for the social.

Saturday was a fun day for the students. Most of the students attended the Lake Tahoe SnowFest, while others tried snowboarding at Mt. Rose Ski Resort. After a day outdoors, the students volunteered at the Student Association for International Water Issues (SAIWI) annual African Dinner. I believe the students enjoyed the excellent food and entertainment. After the busy weekend the students returned home on Sunday.

The recruitment fair allows both prospective students and our faculty to connect. Given the success of the recruitment fair this year, I am hopeful we can continue this for future recruitment groups.

Prospective Students got a first hand look at SAIWI when they volunteered at the 2008 African Dinner. Students helped serve food, greet attendees and help with set up and tear down of the event.



# Student News



## AWRA Student chapter Update

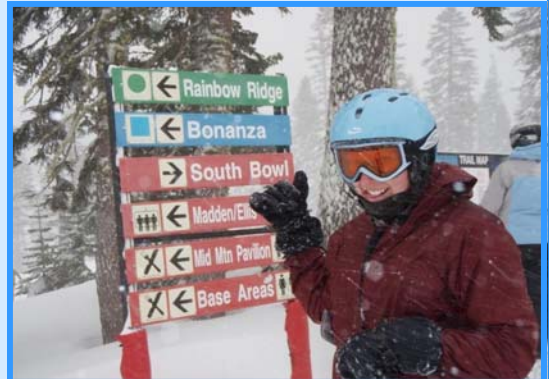
Written by : Dan Pasteris

The time spent selling food and beer at the football games paid off this February with the big AWRA ski trip to Alpine Meadows. It snowed and snowed all weekend, creating a lot of excitement and leading to great powder skiing on both days. We couldn't have asked for any thing more.

Also this spring was volunteer judging at the Northern Nevada K-12 science fair held at Lawlor Events

**Julian Scott** Center. The four Hydro program volunteers were divided between grades 1 and 3, where we spit up into teams and reviewed about 20 posters each. It was quite enjoyable to see the way the kids think at that age, and I'd have to say the scientific process has never been cuter.

Looking forward, we plan to fundraise at the football games in the fall and we'll be looking at activities such as camping and some more facility tours. Contact Julian Scott or Dan Pasteris if you have any ideas you want to put into action.



AWRA Student Member on the 2008 ski trip

## Welcome Annie Kell

### New Student in Spring 2008!



My name is Annie Kell and I am getting a masters in Hydrogeology. I grew up in Seabrook, TX and got a BS in Physics and Math from the University of Houston in 2006. My undergraduate research involved constructing a wire drift chamber to detect cosmic rays. While visiting Lake Tahoe I met my now husband Reuben and I moved here to Tahoe after graduation. I took a year and a half off of school and was married in July of 2007. I am an avid skier, and I love to rock climb, hike, swim in the Lake and spend time with my dog. I plan to remain in the Reno/Lake Tahoe area indefinitely and hope to work with geothermal power.



(African Dinner continued from page 1)



5th Anniversary of the African Dinner, SAIWI members led by student Breann Westfall planned a much larger

event.

The 2008 African Dinner was held at the California Building at Idlewild park in Reno. The event highlighted a buffet style traditional West African Dinner prepared by Ms. Deb Stiver and Agatha Mutua with the help of many volunteers. For the first year, a cash bar was available at the dinner, a very popular inclusion to the event! A Silent Auction was held throughout the Dinner showcasing many items from local Reno businesses. African crafts were also available for sale.

Following the meal, attendees were entertained with presentations on water work done in developing countries by both SAIWI and IDM.

The evening ended with a performance by Java Djembe an African drum and Dance group from Lake Tahoe.

The event had over 200 attendees, required 30 active SAIWI and IDM members working to make the dinner happen, and raised \$10,000 for future trips. The night brought the community, school and DRI together to celebrate in the good work being done to aid developing countries in attaining clean water sources. Thanks to all who donated, volunteered and participated in the event.



## New Student Leaders for 2008-09

**Colloquium Chair : Conny Barth**

**Aqua Clara Editor: TBA**

**Student Rep: Mark Hausner**

**SAIWI Co-Presidents:**

**Miles Becker & Annie Lassaline**

## Congratulations!

**Jenna Green and Justin Huntington**

Are engaged to be married

**Francisco Suarez and Jasmine Aravena**

Are engaged to be married. The wedding will take place in Chile.

**Stephen Humphrey and Sarah Swift**

Will be married this August and will welcome their first child at the new year!

## Awards



**Jeremy Rivord** was named outstanding graduate student of the Year by the Department of Natural Resources and Environmental Science at UNR.

**Peggy Lee, Andie Gehlhausen, and Jeremy Rivord** received the High Impact Award for 2007-08 from the Hydrologic Sciences Program

**Francisco Suarez** was named outstanding Masters Student of the Year by the by the Hydrologic Sciences Graduate Program.

**Mark Hausner** was named outstanding Doctoral Student of the Year by the by the Hydrologic Sciences Graduate Program.

**Stephen Humphrey**, won the best student poster award at the Nevada Water Resources Association Annual Conference held March 4-6, 2008, in Mesquite, Nevada.

**Ramon Naranjo** received 3rd place in the student poster competition at the Nevada Water Resources Association Annual Conference held March 4-6, 2008, in Mesquite, Nevada.

**Dr. Joe McConnell** received the Ansari Medal in January 2008

**Matt Reeves** received the High Impact Award for 2007-08 from the Hydrologic Sciences Program

**Dr. John Warwick** received the Mad Hatter Award for 2007-08 from the Hydrologic Sciences Graduate Program



# Recent Publications

- Devitt, D.A., M.H. Young, M. Baghzouz, and B.M. Bird. 2007. Surface temperature, heat loading, and spectral reflectance of artificial turfgrass. *J. Turfgrass Res.* In press.
- Earman, S., McPherson, B. J. O. L., Phillips, F. M., Ralser, S., Herrin, J. M., and Broska, J., 2008. Tectonic influences on groundwater quality: Insight from complementary methods. *Ground Water* 46(3): 354–371, doi:10.1111/j.1745-6584.2007.00402.x.
- Earman, S. and Dettinger, M. 2008. Monitoring Networks for long term recharge change in the mountains of California and Nevada– A meeting report. California Energy Commission Public Interest Energy research (PIER) Workshop paper CEC-500-2008-006.
- Peterson, C, Gustin, M. The Great Salt Lake – A Source or Sink for Atmospheric Mercury? *Science of the Total Environment*. Submitted (2008).
- Rau, B.M., Blank, R.R., Chambers, J.C., and D.W. Johnson. 2007. Prescribed fire in a Great Basin sagebrush ecosystem: dynamics of soil extractable nitrogen and phosphorus. *Journal of Arid Environments*. 71:362-375
- Rau, B.M., Chambers, J.C., Blank, R.R., and D.W. Johnson. 2008. Prescribed fire, soil, and plants: Burn effects and interactions in the central Great Basin. *Rangeland Ecology and Management*. 61:169-181.
- Reeves, D.M., D.A. Benson, and M.M. Meerschaert (2008), Transport of conservative solutes in simulated fracture networks: 1. Synthetic data generation, *Water Resources Research*, 44, W05401, doi:10.1029/2007WR006069.
- Stonestrom, D.A., Prudic, D.E., Walvoord, M.A., Abraham, J.D., Stewart-Deaker, A.E., Glancy, P.A., Constanz, J. Lacznik, R.J. and Andraski, B.J., 2007, Focused groundwater recharge in the Amargosa Desert Basin, in Stonestrom, D.A., Constanz, J., Ferre, T.P.A. and Leake, S.A., eds., Ground-water recharge in the arid and semi arid south western United States: U.S. Geological Survey Professional Paper 1703-E, p 107– 136. <http://pubs.usgs.gov/pp/pp1703/e/>
- Walvoord, M.A. Andraski, B.J., Krabbenhoft, D.P., and Striegel, R.G., 2008, Transport of Elemental mercury in the unsaturated zone from a waste disposal site in the arid region: *Applied Geochemistry*, v. 23, no. 3, p 572-583, doi:10.1016/j.apgeochem.2007.12.014
- Wang, X.-P., M. H. Young, Z. Yu, and Z.-S. Zhang. 2007. Long-term effects of restoration on soil hydraulic properties in revegetation-stabilized desert ecosystems. *Geophys. Res.Lett.* doi:10.1029/2007GL031725.
- Yin, J., M. H. Young, and Z. Yu. 2008. Effects of paleoclimate and time-varying canopy structures on paleowater fluxes. *J. Geophys. Res.* 113. D06103. doi:10.1029/2007JD009010.
- Young, M.H., G.S. Campbell, J. Yin. 2008. Correcting dual-probe heat-pulse readings for ambient temperature fluctuations. *Vadose Zone Journal*. 7:22–30.
- Young, M. H., H. Lin, and B. P. Wilcox. 2007. Introduction to special section on Bridging Hydrology, Soil Science, and Ecology: *Hydropedology and Ecohydrology*, *Geophys. Res. Lett.*, 34, L24S20, doi:10.1029/2007GL031998.