

April 2010

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Andersen Award Reflection

–Matt Ryan

In early February, several Ecology grad students from the Mortensen-Curran lab group traveled to Denver CO to attend the Weed Science Society of America (WSSA) Annual Meeting, which was held in conjunction with the Society for Range Management. This was a unique meeting and very different from the only other national WSSA meeting I attended in New York City. The wild feeling of the west was ever-present. Instead of alarms indicating an airport shuttle train was approaching, they played Johnny Cash guitar rifts, and an infusion of folks from the Rangeland Society brought along more cowboy boots and hats than I've ever seen.

I presented on my weed-crop competition research that was recently published. Franklin Egan (Ph.D, candidate) presented on how increased dicamba usage associated with GMO crops could lead to greater non-target effects from herbicide drift. Kristine Averill (Ph.D. candidate) presented on the invasive weeds pale and black swallowwort (*Vinetoxicum* spp.), and Rich Smith (post-doc) presented on an innovative outreach method that involves the generation of spider plots with farmers.

One of the highlights of the meeting was the tour to the outskirts of Boulder where we observed the Rocky Flats wildlife refuge and the 120,000 acre Open Spaces conservation park in the foothills of the Flatiron rock formations. As the tour guide explained, it is has one the highest levels of biodiversity in the interior U.S. because it's an ecotone between the tallgrass prairies and the Rocky Mountains and has numerous streams and ravines that cut through the landscape creating microclimates. Between the mountains and the thought provoking research presentations, it was an outstanding meeting and I am grateful for the EGSO helping support my participation with the Anderson Award.



Kristine Averill, Ecology Ph.D. candidate, at the Open Spaces conservation park.

Winter Social at Black Moshannon State Park

-Jennifer Tennessen

What is better than a winter weekend of relaxation? Spending it with friends at a cabin in the woods of a beautiful State Park. This winter the ecology program sponsored a winter weekend social at Black Moshannon State Park. Folks arriving Friday night were surprised to enter their cabin, only to be welcomed by a group of middleaged women having a little too much fun. Not a problem, the group found another cabin nearby, and played board games into the early morning hours. Others came up Saturday for a day of hiking the stunning ridges and valleys of the park, including a bit of uncontrollable slipping down some of the iced-over trails! Other activities included body-sliding across the frozen lake, climbing the eerily tall fire tower, and traversing a boardwalk through the bog. Those of us more

animal-inclined enjoyed learning from our colleagues all about the incredible plant life that make bogs such neat ecosystems. The evening included the successful creation of a roaring campfire despite inches of snow carpeting the fire pit, as well as a potluck of a delicious and creative variety of homemade breads, pasta, chili, salad, brownies, and more! Day-trippers stayed late into the night playing more games before returning home, while others stayed one more night to enjoy the beauty of wintertime in the park. All in all, the winter social was a fantastic opportunity to meet new people, catch up with friends, and explore a wonderful place.

Earth Day Volunteer Opportunity at Black Moshannon State Park

-Jennifer Tennessen

To celebrate the 40th Anniversary of Earth Day, come transplant trees and improve trails at Black Moshannon State Park on Saturday, April 24th. Volunteering runs from 9am -3pm. Meet at the ranger station within the park shortly before 9am (4216 Beaver Rd., Philipsburg, PA). If you arrive later, look for a ranger down by the beach who can tell you where to find us. Bring work gloves, clothes that can get dirty, and plenty of water. Free camping will be available for our group in three designated sites Friday and Saturday night. Feel free to stay either or both nights! Contact Jennv Tennessen with anv auestions. (608) 345-4472 or jtennessen@psu.edu.

Please join me in welcoming Dan Grear, who will be the 2010-2011 Program Service Assistant!

Congratulations to...

Kristine Averill, Aliana Reichert-Eberhart, Lindsey Swierk, Jennifer Tennessen, and Jaime Troupe, who passed their candidacy exam and are now officially Ph.D. candidates in Ecology! **Paul Bartell,** who was awarded a grant from the USDA for a grant entitled, "The Role of Circadian Clocks in Calcium Utilization in the Laying Hen."

M. Luke McCormack, who received the J. Brian Horton award, recognizing his service to the Ecology Program.

David Mortensen, who was recognized for outstanding agricultural research with the Alex and Jessie C. Black Award.

Nick Polato, who received an NSF-funded student travel fellowship for the 7th annual Ecological Genomics Symposium, to be held in Kansas City in November.

Eric Post, who was awarded the Edward D. Bellis award, recognizing his contribution to educating and training graduate students in the Ecology Program.

Laura Russo, who was recognized by an Honorable Mention for her NSF Graduate Research Fellowship application. She has also received a Network Science Exploration Research Grant from Penn State. This grant provides \$4000 towards the awardee's research project.

Matt Ryan, who has received several awards, including, the Intercollege Graduate Student Outreach Achievement Award from Penn State, the 2010 Gerald O. Mott Meritorious Graduate Student Award from the Crop Science Society of America and an Outstanding Graduate Student Award from the Northeastern Weed Science Society.

Collin Shepard, who was selected as a finalist for the Presidential Management Fellows class of 2010. This program was developed "to attract to the Federal service outstanding men and women from a variety of academic disciplines and career paths who have a clear interest in, and commitment to, excellence the leadership in and public management of policies and programs."

Lindsey Swierk, who received an NSF Graduate Research Fellowship.

Recent Publications

(Journal articles by students as first author, or by faculty members published in *Science*, *Ecology*, *PNAS* or similar journals.)

Luis, A. D., R. J. Douglass, J. N. Mills, Bjørnstad, O. N. 2010. The effect of seasonality, density and climate on the population dynamics of montana deer mice, important reservoir hosts for sin nombre hantavirus. *Journal of Animal Ecology* 79:462–470.

Marchetto, K.M., Jongejans, E., Jennis, M.L., Haner, E.M., Sullivan, C.T., Kelly, D. and Shea, K. (2010) Shipment and storage effects on the terminal velocity of seeds. *Ecological Research* 25: 83–92.

Ryan M.R., Mortensen D.A., Bastiaans L., Teasdale J.R., Curran W.S., Seidel R., Hepperly P.R., Wilson D.O.. 2010. Elucidating the apparent maize tolerance to weed competition in long-term organically managed systems. *Weed Research* 50:25-36.

Ryan, M.R., Smith R.G., Mortensen D. A., R Seidel, Teasdale J.R., Curran W.S., Shumway D.L. (2009.) Weed-crop competition relationships differ between organic and conventional cropping systems. *Weed Research* 49:572-580.

Wiederholt, R. and Post, E. (2010). Tropical warming and the dynamics of endangered primates. *Biology Letters* 6: 257–260.

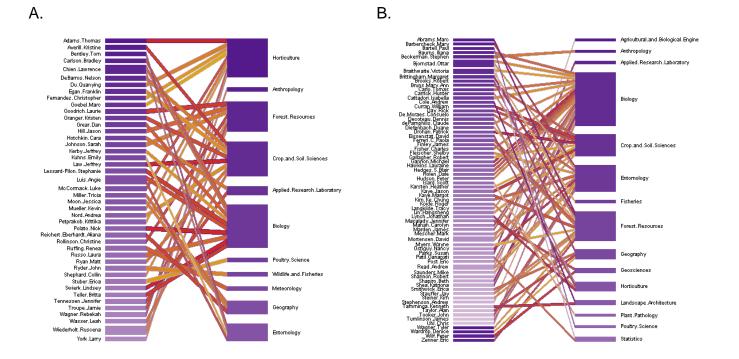


Figure 1. Departmental affiliations of Ecology Program students and faculty. These bipartite networks (with two different types of nodes) demonstrate the departmental affiliations of the Ecology Intercollege Graduate Degree Program's graduate students (A) and faculty (B). Any mistakes in departmental affiliation are deeply regretted. Courtesy of Laura Russo.