

IGDP in Ecology Newsletter

Notes from the Field

July 2004 Volume 1 No 7

Program Chair's Corner

I'd like to take this opportunity to highlight a couple of important developments since our last newsletter. We were all delighted to learn that the Graduate Student proposal to host the Northeast Ecology and Evolution Conference here at Penn State was favorably reviewed and that Penn State will be the site of the March 2005 conference. The conference will be held March 18-20. Please mark your calendars. While I know many students and post-docs were and will be involved in the conference planning, a special word of thanks to the Program Committee, whose membership includes: Joe Dauer ,!Matt Ferrari, Emily Rauschert, Pat Ryan, and Carrie Schwarz.

I'd also like to highlight some important events that are just around the corner. By now you've received the flier detailing the Ecology Graduate Mini-Symposium to be held Wednesday evening July 28 at the Millbrook Marsh Nature Center. In addition to socializing with colleagues, it is an exciting time for the program as we will hear from nine graduating students as they finish their work here in the program. Please RSVP to Rosemarie (rgh7@psu.edu). If for some reason you haven't received an announcement, contact Rosemarie. All program members are invited! Later in the summer the graduate students have organized a picnic to kick off the Fall semester. The picnic will be held on Saturday August 28 from 1-4 at Sunset Park. Ottar Bjørnstad and Joe Dauer are organizing a post-doctoral vs. predoctoral volleyball game... don't miss it! During the picnic we'll also take the opportunity to welcome 11 new students to the program. A special thanks to Glenna Malcom and the EGSO for organizing this special event. Please RSVP Glenna Malcom at gmm193@psu.edu.

~Dave Mortensen, Program Chair



Ecological Fitness?

The Ecology program has many members who love to run, and this past fall, the momentous Tussey Mountainback 50 mile relay brought some together for a day of crazy relay fun! I had the privilege of joining the team Lugubrious Drollery consisting of faculty stars Dave Mortensen, Peter Hudson, and Ottar Bjørnstad, grad student Joe Dauer and Ecology friends Marvin Hall, Brian Clark, and Greg Balazich. Jenny Edwards made an appearance on rival Team Kino. The fantastic 50-mile course winds through the magnificent Rothrock State Forest. Relay legs range from 2.8 miles to 6.2 miles and vary in difficulty. The number of legs a runner completes depends on the size of the team. Participating in the relay is an incredible way to spend part of an autumn weekend! You can interact with great people in our program in a completely new and different setting! The 2004 relay is coming up on October 2, 2004. Here's your chance to get running and get pumped! Stay tuned for team-forming plans...For more information: www.tusseymountainback.com.

~ Randa Jabbour, PhD student

Noteworthy...

Nora Peskin, MS Student, has been awarded the Katherine Mabis McKenna Fellowship which recognizes outstanding graduate students in the College of Ag whose area of study relates to the use of plants for environmental stewardship, especially in stream or watershed conservation.

Emily Rauschert, PhD Student, has received a NASA Space Grant Fellowship awarded to outstanding students in the field of study that promote the understanding, assessment and utilization of biological research.

It's a Gall World After All

The Women in Science and Engineering (WISE) Institute at Penn State recently sponsored a oneweek residential career awareness program for high school female students who participated in hands-on workshops and projects in science and engineering fields throughout the week. On Tuesday, June 29, Ecology affiliates Jenny Edwards, Tracy Gartner, Glenna Malcolm, and John Tooker led the workshop, "It's a Gall World After All" at Millbrook Marsh Nature Center.



Students were introduced to the wide variety of galls and gallforming insects and explored their own questions and hypotheses to determine what height, leaf age,

population size, and more) might influence the grape and goldenrod. Many of the women had not been exposed to ecological research before and it was exciting to see them participating in inquiry-based outdoor exploration. If you are interested in participating in future workshops, contact Katie Rung or Nuket Acar at the WISE Institute for more information: cxg1@psu.edu.

~Tracy Gartner, Post~doc Scientist

Introducing...



Andrew Hulting

finished his PhD degree at Montana State University~ Bozeman in April 2004 and has recently joined David Mortensen's lab as a post-doc. Andy's PhD work focused on the impacts of diversifying small grain-based crop rotations on the population ecology of wild oat (Avena fatua). He moved to Penn State

to pursue his interests in cropping system level effects on weed population temporal and spatial dynamics. He is responsible for helping coordinate multidisciplinary research activities in a project aimed at transitioning cropland from conventional to organic production at Rock Springs. He is also interested in identifying mechanisms that facilitate the establishment and persistence of invasive plant species in natural areas. Andy enjoys many outdoor activities, including camping, hiking and fishing, and looks forward to exploring Pennsylvania.

Schedule of Events:

July 28 Mini-Symposium 4-8:30 pm Millbrook Marsh Aug 28 Welcome Picnic 1-4 pm Sunset Park



Derek Johnson

received his M.S. from the University of South Florida with Dr. Peter Stiling, with whom he received tutelage in the field of experimental ecology. Derek received his Ph.D. from the University of Miami with Dr. Carol Horvitz where he learned to use data-driven spatial

models to address ecological questions. Currently a post-doctoral researcher with Ottar Bjørnstad (Penn State University) and Andrew Liebhold (USDA Morgantown, WV), he is studying the complex population dynamics of forest insect pests across large spatial scales. He is investigating the pattern and mechanisms driving spatial synchrony and traveling waves of insect outbreaks. Using models (i.e. parasitoid-host-patch quality), he is factors (light, plant able to elucidate the complex spatial dynamics of insects such as the larch budmoth in the Alps and the gypsy moth in North America. The goal of this distribution of the herbivorous insects on willow, research is to better understand the causes of forest insect outbreaks.



John Tooker received his undergraduate degree in Biology from Bates College in Maine and his Masters and PhD in Entomology at the University of Illinois at Urbana-Champaign under the supervision of Larry Hanks. At Illinois, he studied tritrophic interactions and chemical ecology, focusing

on a gall wasp in a tallgrass prairie system. Now as a post-doc in the lab of Consuelo De Moraes, he is studying chemical ecology of herbivory, with emphasis on gall insects. Of all plant-insect interactions, perhaps the most complex and poorly understood are those involving insects that form galls, even though gall insects are common and the gall-forming habitat has been very successful evolutionarily. He is researching the response of plants to gall formation, including the volatile chemicals that plants emit and the plant defensive pathways triggered by galls with the goal of providing insight into the adaptive significance and evolution of galls. Despite his first name not being Charles; he is known to some as Dr. deGaulle.

Congratulations Graduates! Joseph Dauer Ylva Besmer Jennifer Rubbo Adam Kaeser Masami Tonegawa

Always looking for good stories! Please send next newsletter submissions to Jenny Edwards by Aug 25th. jme145@psu.edu