

IGDP in Ecology Newsletter Notes from the Field

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Introducing the Newest Member of the Huck Institutes of the Life Sciences

Dr. Michael Radis was born in Lewistown, Pennsylvania, but grew up in suburban Philadelphia. He received his Bachelors of Science degree from the Pennsylvania State University, his Masters degree from Temple University, and his Doctorate from the University of North Dakota.

Dr. Radis has taught at all levels of education. He spent five years as an elementary school teacher and taught in higher education at Mayville State College, Mayville, North Dakota. He



then came to Penn State University, where spent almost 20 years at the Altoona University Park campuses, directing both Reading component of the Comprehensive Studies Program and the Ronald McNair Scholars Program. In 2001 he left Penn State for a position in the Graduate School at Howard University, Washington, DC. There he directed the NSFfunded Alliances Graduate Education and the Professoriate (AGEP) program. He returned to

State College in 2006, and is excited about beginning work with the Huck Institutes.

Dr. Radis is married with two grown children. His wife, Susan, is a Professor of Social Work at Juniata College in Huntingdon, PA. His son, Josh, is a graduate student in History and Humanities at California State University, Sacramento, and his daughter, Emily, is an Account Administrator with the State and Local Government Risk Management Unit of Lexis-Nexis Corporation in Washington, DC.

We are always looking for news and stories! Please send submissions for the next newsletter to JB Moon at: jbm162@psu.edu

Taking the Summer by the Scruff

~ Dan Grear, Incoming IGDP Ecology Student

I had the opportunity to come to State College the summer before I officially enroll at PSU to start working in the field system where I will be focusing my research. I arrived in

May after spending more than a year preparing, drafting, and defending my Masters thesis, at the University of Wisconsin. I was looking forward to starting fieldwork. working with the Hudson Lab woodland trapping (Peromyscus spp.) in Centre and Huntington counties. We trap these mice in order to monitor the prevalence of endemic intestinal parasites. We take



body measurements, collect samples for parasite testing, and selectively treat the mice with a drug that clears intestinal parasites. Former researchers in the Hudson lab discovered that male mice in Italy act as 'superspreaders.' That is, males appear to contribute more than their fair share to spreading parasites. Thus, by treating males these researchers were able to reduce the prevalence of the parasite in the entire population. Treating females, on the other hand, only caused female prevalence to drop. Our goal this summer has been to replicate these experiments here in Pennsylvania.

This is how I became acquainted with the woodland mice of central PA. It took me a few days to get my 'field legs' back, but I found myself enjoying the mornings with my new rodent friends. Part of the appeal in coming to a new place is getting to know the details that give a locale a unique sense of place. I am beginning to notice the little things that make the PA woods unique - big hills, turtles, salamanders, and rattlesnake sightings! For more information on previous mouse experiments see:

Perkins, S.E., I.M. Cattadori, V. Tagliapietra, A.P. Rizzoli, and P.J. Hudson. 2003. Emperical evidence for key hosts in persistence of a tick-borne disease. International Journal of Parasitology 33:909-917.

Ferrari, N., I.M. Cattadori, J. Nespereira, A.P. Rizzoli, and P.J. Hudson. 2004. The role of host sex in parasite dynamics: field experiments on the yellow-necked mouse (Apodemus flavicollis). Ecology Letters 7:88-94.

Introducing the Incoming Class of 2006

Lawrence Chien is from Tianjin, China. He completed his undergraduate studies at Colorado College, Colorado Springs, CO, with a double major in mathematics and biology. For the past two years he has been working as a research technician in a hematology lab at Children's Hospital, Boston. Lawrence will begin work towards his Ph.D. this fall with Ottar Bjornstad (Depts. of Entomology and Biology) and Bryan Grenfell (Dept. of Biology). He plans to examine spatial and temporal infectious disease dynamics.

Nelson DeBarros is from Taunton, MA. He graduated from Providence College, Providence, RI with a B.S. in Biology. Currently, Nelson is monitoring salt marshes on Cape Cod. He will complete lab rotations with David Mortensen (Dept. of Crop and Soil Sciences) and Consuelo De Moraes (Dept. of Entomology) as he works toward his Ph.D.

Kristen Granger is from Coopersburg, PA. She received a B.A. in Biology from Wellesley College, Wellesley, MA, where she became interested in plant ecology and completed a thesis on chloroplast movement. Kristen will be working on her Ph.D. with Robert Gallagher (Dept. of Crop and Soil Sciences), investigating the effects of stress on seed phenolics.

<u>Daniel Grear</u> is from Wisconsin. He received a B.S. and M.S. from the Department of Wildlife Ecology at the University of Wisconsin. He will be working towards his Ph.D. with Peter Hudson (Dept. of Biology). Daniel will be researching the mechanisms behind disease transmission in wild animal populations.

<u>Vanessa Hayes</u> comes to us from the DC area, where she received her B.S. from Longwood University, Farmville, VA in 2003. She began work last spring with Marc Abrams (Dept. of Forest Science) on an oak-beech/hickory forest conservation project in NY. Vanessa will be working towards her M.S. and looks forward to meeting everyone.

Jeffrey Law recently completed his M.S. in Zoology at Texas Tech University, Lubbock, TX. His thesis focused on finding the most effective and cost efficient places to preserve the amphibians, reptiles, and mammals of Texas. Jeffrey will be working with Andrew Cole (Dept. of Landscape Architecture). He plans to study the mammalian ecology in created wetlands. After spending the past three years in Texas, he is quite excited to be in the northeast.

<u>Sara Mays</u> graduated with a B.S. in Biology from Lock Haven University, Lock Haven, PA in 2003. Since graduation she has worked at several laboratory positions, including one at Hershey Medical Center, one at a private pharmaceutical lab, and one at a salivary hormonal lab. Sara will begin working toward her M.S. with Hunter Carrrick (Dept. of Wildlife and Fisheries). Her work will focus on stream periphyton.

<u>Nicholas Polato</u> graduated from SUNY, Buffalo, NY in 2000 with a double major in biology and environmental studies. He spent a few years traveling throughout the US. He also worked as a field technician, followed by three years as a genetics laboratory

technician at Cornell University, Ithaca, NY. Nick will be working towards his M.S. with Iliana Baums (Dept. of Biology) on the ecology of corals in the Pacific Ocean.

Chris Ross hails from Emmaus, PA. He graduated from Colgate University, Hamilton, NY with a double major in Environmental Biology and Geography. He then worked as a field assistant on a climate change project in Manitoba, Canada, and was an environmental educator at a camp in the Poconos, PA. He is now working on his M.S. with Jason Kaye (Dept. of Crop and Soil Science), looking at the effects of wildfires and thinning on carbon cycling in ponderosa pine forests near Flagstaff, AZ.

Anna Starovoytov graduated with a B.S. in Environmental Science from Rutgers Cook College, New Brunswick, NJ in 2004. Since then she has been working for the Natural Resources, Conservation Service, a government organization that assists farmers with on-farm conservation practices. At Penn State she will be working with Rob Gallagher (Dept. of Crop and Soil Science) on management of infertile soils.

Michelle Tober (a.k.a. Misha) is from Arlington, VA, but has traveled and lived all over South America in her younger years. She has been living in Pittsburgh for the last three years. Misha graduated from Longwood University, Farmville, VA in 2003, with a B.S. in environmental biology. She will be working towards her Ph.D with Dr. Stephen Beckerman (Dept. of Anthropology). Misha will be studying conservation strategies for the rainforests and hopes to travel to South America to do her research.

Upcoming Events

Ecology Fall Welcome Picnic

Please come along and welcome the new students to the program at this year's fall picnic in Sunset Park on Friday the 15th from 4 pm to dusk. As in previous years, the program will provide barbecued food and soft drink. Please help the feast along by bringing a side dish or dessert to share. Do bring partners, spouses, and families - lets make it a big picnic!

A faculty versus student volleyball game has become a tradition at this event, so come along prepared to jump around in the sand, or at least laugh and take photographs of those who do. It is anything but serious; our volleyball prowess typically ranges from average to worse. The students do, however, something to prove after last years defeat! RSVP Andrew Wilson (amw328@psu.edu) so that preparations can be made. See you there!

Caving Trip

The Ecology IGDP invites you along for a trip into the Tytoona Cave on the 22nd of September. We'll be leaving campus at 11:15 Friday morning and returning at approximately 5:00 that afternoon (details to follow). Come learn about karst topography, the ecology of sinkholes, and spend time exploring the down under. Return home a seasoned speleologist. Necessary equipment and training will be provided by the Shaver's Creek Environmental Ed group under the direction of Rod Lee. We have room for 20 people so sign up early. To sign up contact Jessica Moon at jbm162@psu.edu.