

IGDP in Ecology Newsletter

Notes from the Field

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Buzz About Global Climate Change

The topic of global climate change is receiving a lot of attention lately. Even the skeptics are having a hard time keeping their heads in the sand. A recent poll by the *Chicago Sun Times* indicates that among those polled, 71% think global warming is real, 53% think warming is caused more by human activity than by normal Earth cycles, and 70% think the effects of global warming can be reduced. At least 80% say they are willing to take the following steps to reduce greenhouse gas emissions and conserve energy: recycle, turn thermostats down in winter by 2°, caulk around windows, combine driving trips, wash clothes in cold water, turn down water heater temperature, and buy energy efficient light bulbs, appliances and cars.

As a skeptical scientist, it's hard to believe these poll results, especially with so many giant SUV's on the



streets. Nevertheless, climate change certainly is receiving more attention in the press, with cover stories in several news magazines, including this one in *Time* magazine.

Of course, this buzz isn't restricted to the popular press, but stems largely from the scientific literature. The cover of

Science magazine also recently featured a story on climate change with mounting evidence of melting glaciers and ice sheets. Recent Science and Nature articles are also highlighting the possible effects of climate change on organisms, including the possible link between climate change and amphibian declines, effects on plant community composition, changes in species ranges, and increased selection for phenotypic plasticity, among many others.

Recently, an article from the *Journal of Animal Ecology* by our very own Angela Anders (PhD student in Biology) and Eric Post (faculty in Biology) was featured in the Editors' Choice section of *Science* magazine. The editors of *Science* recognized this article as a valuable contribution for showing the effects of contemporary climate change on population density across the entire range of a species, and hence on its potential population decline.

Anders and Post quantified the relationships, over four decades, between climatic oscillations, local temperatures, and population biology of the yellow-billed cuckoo, a North American migrant landbird, using data from the U.S. Geological Survey's Breeding Bird Survey. The cuckoo population densities across their breeding range showed a lagged effect, declining after years when the



local temperatures were high. The strength of this effect was predictive of longer-term population decline, which may be caused by a relative scarcity of invertebrate prey after warmer winters. [J. Anim. Ecol. 75, 221 (2006)]

With all the mounting evidence for climate change and its effects on organisms, this is a great time to stimulate discussion on the topic and think about possible effects on your organism of choice. Accordingly, the overwhelming majority voted for the Ecology of Climate Change as next year's spring seminar topic. Look for more info on the series and a list of potential speakers at the Mini-Symposium Tuesday.

~Angie Luis, Editor in Chief (PhD Student, Biology)

PSU Ecology Alumni a Potential Resource

Ecology is one of Penn State's oldest Intercollege Graduate Degree Programs and has been conferring degrees since 1973. The Program has 230 (and steadily growing!) M.S. and Ph.D. alumni including faculty at excellent universities, researchers and administrators at non-profit, governmental agencies and industry. These

previous graduates represent a wealth of knowledge, experience and connections that we hope to tap into. Recently the Ecology Program was fortunate to receive a list of all the alumni and their contact information, as well as the results of an "Alumni Survey" that went out in 2000 and received approximately 30 responses. The EGSO is now working to create a long-term plan of contacting the alumni in order to develop a reciprocal sharing of information and resources. Eventually our goal is to develop a mentoring program in which we link students with previous graduates in their field who can guide them in their career search. We are excited to have Dr. Oscar Rocha, a 1990 Ph.D. graduate, speak during our seminar series on April 24th and attend our Spring Mini-Symposium on April 25th. Other alumni for whom we have email contact info have been invited to the Mini-Symposium and we hope to welcome their interests and ideas in kick-starting alumni relationships. If you are interested in participating as a faculty or student Alumni Committee member, please contact EGSO president Andy Wilson (amw328@psu.edu) or Jenny Edwards (jme145@ psu.edu).

~Jenny Edwards, Asst Director, Graduate Ed, Huck Institute

Congratulations to several recent or soon to be PhD graduates that have landed faculty positions across the country starting in the fall of this year!

Danielle Garneau will be working as a one-year sabbatical replacement at Colby College in Maine.

Eric Long recently accepted a tenure-track position (Assistant Professor of Ecology) at Seattle Pacific University.

Loren Byrne landed a joint position at the College of Wooster as a Visiting Assistant Professor of Biology and at Ohio State Wooster campus as a post-doctoral scholar with Parwinder Grewal, Professor of Entomology and Director of the Urban Landscape Ecology Program.



Come join in the fun! Volleyball (or softball) played weekly, 4pm Sundays in Sunset Park. Email Eelke for details (exj10@psu.edu).

Ecograds win awards for poster presentations

Randa Jabbour won first place in the Biological Sciences category at the annual College of Agricultural Sciences/ Gamma Sigma Delta Graduate Research Expo on March 22nd and 23rd. She won \$300 and a plaque for her poster on "Habitat complexity effects on the persistence and movement of entomopathogenic nematodes."

In the Environmental and Natural Sciences category, **Shawn** Rummel won 2nd place, receiving \$200 and a certificate for his poster on "Forest liming in the Mosquito Creek Watershed: Effects on soil chemistry and the white-lipped snail (*Neohelix albolabris*)."

In the same category, Loren Byrne won 3rd place, receiving \$100 and a certificate for his poster, titled: "To mow or not to mow? On the biodiversity and ecosystem functions in urban habitats." Loren also won first prize for his poster at the 9th annual Environmental Chemistry Student Symposium on March 17th and 18th in the Environmental Engineering and Ecology category.

Joe Dauer won first place in the Physical Sciences and Mathematics category of the 2006 Graduate Exhibition March 26th, receiving \$500 for his poster on "Measuring seed movement at multiple atmospheric levels."

Ecologists all over campus are leaving the confines of their offices and venturing out... That's right. It's time for the field season! This is the time of year when ecologists are reminded of why they became ecologists... Or are they? Let's find out...

"How do you feel about the approaching field season?"

"Hopeful. I always feel hopeful at the beginning of the field season. Disillusionment and cynicism arrive in July..." Eric Nord

"My field season is in the lab and exists year round." Glenna Malcolm

"I can't wait to get out there, my enthusiasm is spiked by the nice spring days we've been having recently. I'll be away from mid May to mid July, but might have to venture back into town for some key games in the Soccer World Cup." Andy Wilson "Excited and ready to go!" Randa Jabbour

"I fell like it will be fun this year for a change." Emily Rauchert

"Great! I can't wait to get out there!" Jill Cromp

"I am excited because I will be going to a field site in Poland for a week. Then it will be back to my computer and the lab." Kevin Mueller

"Glad to be done." Dave Lieb