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Upcoming Events:

- **Harold and Florence Mayer Lecturer Dr. Jan Monk of the University of Arizona**, "The Normal Way: Exploring The Career Paths of Early Women Geographers." Friday April 13 at 2:30pm in the AGS Library
- **Undergraduate Research Presentations, Graduation, & Awards Ceremony** Friday May 6 in the AGS Library

Letter from the Chair

Distinguished Professor Mark D. Schwartz

Well, another spring is rolling into Milwaukee—an especially early one for the plant community. Exceptionally warm winter weather, followed by a week of very mild temperatures in mid-March, including a record high of 78°F on March 14th, lead to the lilacs in my backyard undergoing first emergence of leaves from their buds. This is the earliest occurrence of this phenological event (by a whole week) I have observed since moving to Milwaukee in 1992, as well as (based on my model using daily temperature data from the airport) for the entire period-of-record since 1943. Quoting Bob Dylan (who was really before my time), "The times they are a changin"...indeed!

As for the Geography department, we have undergone a quite literal change ourselves, in location. Most of you will recall the nearby Columbia Hospital. This property was sold to UW-Milwaukee in late 2010, and now having "completed the square" for our campus, has been renamed the "Northwest Quadrant" (as a geographer I have been jokingly referring to it as the "Northwest Territories.") The additional space is a welcome addition to our "spatially challenged" campus, but it will take considerable time to remodel and fully utilize



these additional buildings. We moved here (along with the rest of the residents of the 4th-8th floor of Bolton Hall) in late December 2011. The Department is scheduled to be here for roughly 18 months, while air conditioning is added to all rooms in the so-called "tower" portion of Bolton Hall. We expect to move back to the 4th floor of Bolton sometime during the summer of 2013.

Otherwise, students and faculty in the department continue to move forward productively in their research and teaching activities (as you will read in other parts of this newsletter). During the current Spring 2012 semester the department was pleased to be able to support the travel of eleven graduate students to present papers at the Association of American Geographers (AAG) Annual Meeting in New York City (in February). Also, we look forward to welcoming past AAG President Prof. Janice Monk (University of Arizona) to our campus in April to deliver our spring semester Harold and Florence Mayer lecture. So, this was just a quick review of some of the things going on. As always, your continued interest and support are greatly appreciated!

Join us in our congratulations to:

- Jonathan Burkham for receiving an Assistant Professorship at UW-Whitewater
- Ryan Convington for receiving the UWM Distinguished Graduate Student Fellowship
- Chengbin Deng for receiving the UWM Dissertation Fellowship
- Alarico Fernandes for receiving the AOP Fellowship from the UWM Graduate School

Tropical Fieldwork Course Returns to Belize, March 2012

Dr. Mick Day, Joel Dohm, Jessica Helgesen, Joe Madden, Brook Process, and Cole Rasmussen



For the first time since 2001, the tropical fieldwork course (GEOG 654) returned to Belize, where we investigated a decade's-worth of land use change in the Cayo West Special Development Area, in effect repeating an MA thesis study carried out

about ten years ago by Liana Escott. The SDA was established in 1992, so the two studies combined provide a picture of how land use planning has fared over 20 years in a volatile district of Belize experiencing rural and urban population growth, changing agricultural priorities, increasing tourism, foreign investment and infrastructure development, notably that associated with the construction of three hydroelectric power facilities immediately to the south.

We were based just east of the Cayo West SDA in Unit-edville, at the Lower Dover Field Station, a research facility owned and operated by UWM Geography MA graduate Bill Reynolds. Bill acted as driver and facilitator during our study, and we were joined for a week by current MA student Brendan Vierk. Our primary modus operandi was to drive throughout the SDA, utilizing GPS and comparing the current land use with that proposed on the original SDA map and that documented in the prior study.

Despite March being the height of the dry season, it rained intermittently for much of the first week, although this had little impact on the fieldwork program and was followed by eagerly anticipated heat and sunshine dur-

ing the second week. Our visit was enlivened too by national elections, in which the incumbent United Democratic Party retained power, albeit with a much-reduced majority over the rival People's United Party, and by the national holiday known as Baron Bliss Day, which celebrates the philanthropy of an early 20th Century European visitor to Belize. We also witnessed the passage of participants in the annual 100 mile plus canoe race down the Belize River from San Ignacio to Belize City, experienced the sights and sounds of San Ignacio's weekly market, and noted the preparations for Easter's 140 mile cross-country cycle race. This, plus balmy trade winds, starlit night skies, tropical forest, howler monkeys, cascading rivers, Mennonite farms, Mayan ruins and hours in the back of a pickup truck on challenging roads made for a lively field experience!



So, how has the SDA plan fared? In a word, poorly! There are conflicting opinions as to whether it was ever legally operative, it was never well-understood and it has been widely ignored by government and public alike. Compliance has fallen from about 96% in 2002 to less than 80% in 2012. Peri-urban development has encroached into land designated as rural, tourism has burgeoned and the forest reserve has been devastated by road construction, agricultural clearance and residential subdivision, much of it promoted by foreign interests and all associated with the adjacent hydroelectric schemes. In the continued absence of a national land use plan, the Cayo West SDA experience bodes ominously for Belize's future.

Geography Faculty News

Dr. Rina Ghose and Margaret Pettygrove

Since 2009, Dr. Rina Ghose and doctoral student Margaret Pettygrove have been engaged in a collaborative research project exploring urban agriculture and food in the City of Milwaukee. The initial stage of this project investigated the process of community garden development by citizen groups in Milwaukee's Harambee neighborhood through in-depth interviews with community garden organizers and participants and participant observation at multiple community gardens. This research illuminated significant barriers to community gardening (for example, city land use policies) and strategies by which citizen groups construct networks to overcome these barriers.



Richards Street Garden, August 2010



Nigella Commons Garden, May 2010

The planned second stage of this project will examine Milwaukee urban agriculture activities in greater depth and across multiple neighborhoods. It will incorporate GIS-based modeling to evaluate spatial variation in food accessibility and community garden availability. As part of this food accessibility mapping, we intend to collect data on the quality, price, and variety of foods available at grocery stores in different Milwaukee neighborhoods. Finally, we will explore food politics as they are practiced by different local urban agriculture and food activist organizations. In doing so, we aim to understand efforts to contest inequities or injustices related to urban food, including the role of spatial knowledge production. We will examine how these organizations create or utilize spatial data (such as maps of community garden locations) in their work and how organizations compete or collaborate with each other. We will also look at the role of scale, including the construction of scale by activist groups and whether groups engage in scalar politics.

A Longitudinal Tract Database (LTDB)

Dr. Zengwang Xu

As the 2010 census and the American Community Survey (ACS) data become the most up-to-date information in studying human and social dynamics, many social scientists may want to examine the change of census variables between current and historical surveys, or conduct a longitudinal analysis.



They cannot easily do it because not only do the definitions of some variables vary, but also the boundaries of the enumeration units (e.g., census tracts) constantly change across different censuses. To make census variables across different censuses refer to a constant geographic basis, a project conducted by Zengwang Xu (University of Wisconsin – Milwaukee) and Brian Stults (Florida State University) under the advice of Professor John Logan at Brown University interpolated the census tract data from as early as 1970 to the 2010 census tracts.

The project provides a database, termed as Longitudinal Tract Database (LTDB), and interpolation tools. The LTDB has already had a series of census tract-level variables at early censuses (i.e., 1970, 1980, 1990, and 2000 census) interpolated to the 2010 census tracts. Users can directly use these variables without doing any further process. For other census variables or non-census data that are collected at early census tracts, the project provides tools implemented in MS Access and Stata to interpolate these data to 2010 census tracts. The tool in MS Access has a friendly user interface. The Stata code requires users to manually replace their variable names in the beginning of the code. For both tools, users just need to provide a table of variables indexed by tract IDs, which should be a combination of State, County and Tract FIPS codes in a specific format. Both the LTDB and the interpolation tools are free for public (<http://www.s4.brown.edu/us2010/Researcher/Bridging.htm>).

Two interpolation methods were used in the LTDB. They were the areal-and-population weighting interpolation method used to 2000 census data and areal interpolation method used to 1970, 1980, and 1990 census data. A thorough accuracy evaluation has been done in compari-

Continued on p. 4...

Geography Faculty News (cont'd...)

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son of the two methods to different kinds of change of the tract boundary. Particularly, the 2000 census variables were interpolated to 2010 census tracts with very high accuracy, which is as accurate as most commercial products. The census variables before 2000 were interpolated with reasonable accuracy. The interpolation accuracy is dependent on how the tract boundary changes. For a large portion of non-change tracts, simply consolidated or split tracts, the accuracy is very high for both methods. The interpolation accuracy is compromised only for a small portion of tracts that experienced more complex change. The improvement in interpolation accuracy will be continuing for the census data prior to 2000 census.

Dr. Rina Ghose

Dr. Rina Ghose has continued her research on Critical GIS and urban Geography. Her research in GIS has focused on understanding the complexities of Public Participation GIS, as well as the role of GIS in urban planning. She also published her research on rural gentrification. Her recent publications are listed below.



2012 Mukherjee, F. and Ghose, R. "Exploring the Complexities of Community Engaged GIS." *International Journal of Applied Geospatial Research*. Accepted.

2012 Day, P. and Ghose, R. "E-Planning through the Wisconsin Land Information Program: The Contexts of Power, Politics and Scale." *International Journal of E-Planning Research*, vol. 1, no. 1, 75-89.

2011 Mukherjee, F. and Ghose, R. "Tracing the Historic Trajectory of GIS Development and its Impacts on Contemporary Practice." *Journal of Urban Technology*, vol.18, no.5, 141-158.

She was also invited to be a member of the program committee of International GIScience Conference, which emphasizes theoretical research conducted on GIScience. Finally, she presented a paper titled "Challenges to Qualitative PPGIS in the context of Neoliberalization", at the 2012 annual meeting of Association of American Geographers (AAG) at New York.

Dr. Changshan Wu

Dr. Changshan Wu has received a research growth initiative (RGI) grant to support his study, *urban impervious surface estimation using remote sensing techniques: a simulation approach*. Urban impervious surfaces represent those materials that do not absorb water or moisture, and most urban infrastructures, such as rooftops, streets, highways, parking lots, and sidewalks, are impervious. The quantification of urban impervious surface distribution has proven to be essential to examine urban development, and evaluate adverse influence of urbanization on water quality, urban climate, air quality, and natural habitat. During the past twenty years, remote sensing techniques have been applied extensively in quantifying impervious surface extent and its distribution. The uncertainty of such estimates, however, has not been fully studied, and the effectiveness of a particular method is dependent on many factors, such as study area, sampling approach, and more importantly, the spectral and spatial information of the image. To address this issue, this project will develop a simulation approach to explore potential factors affecting the uncertainty of the impervious surface estimation. With a better understanding of the factors causing the uncertainty, an optimal method of impervious surface estimation method can be achieved.

Dr. Hyejin Yoon

Dr. Hyejin Yoon attended the 58th Annual North American Meetings of the Regional Science Association International, Miami, FL and presented her paper, "Formation of cluster dynamics with internal and external linkages."



Dr. Yoon organized three sessions on Geographies of Entrepreneurship in Local and Global Economies: Contexts, Practices, and Processes with Ben Spigel at the Annual Meeting of the Association of American Geographers in New York City in 2012. She presented her ongoing research, "Easy strategy to survive? : Entrepreneurship and Korean immigrants in Winnipeg, Canada" in the session.

Undergraduate News

Jess Helgesen

Sustainability for habitats, ecosystems, and natural areas is often threatened due to sprawl from poor planning and collaboration between urban areas. Such situations in my hometown Bellevue (Green Bay) and during travels through personal investigation of other urban areas (Santiago, Chile, and Lima, Peru) have motivated me to investigate more sustainable measures to protect habitats and increase biodiversity with a regional approach. Through the Honors College and Geography Department at UWM, I have had the opportunity to write a senior thesis that critically analyzes which scale will most benefit the implementation of sustainability for protection and enhancement of habitats/ecosystems, and increase biodiversity within a region. I am specifically evaluating sustainability implementation at the city scale versus multi-city or regional scale and watershed region. For my case studies I am investigating three regions through in-depth interviews with governmental officials,

non-profits and other stakeholders. Furthermore, I am evaluating the theory of sustainability, scale, and the delineation of the following regions: Metro regional government in Portland, Oregon (multi-city metropolitan region), Auckland Regional Council in New Zealand (watershed region), and SEWRPC a regional non-profit organization in Southeastern Wisconsin (seven county region).

Throughout my thesis project I completed a wetland internship with the EPA-GRO Program in Portland and conducted interviews with Metro employees and investigated the city from the ground, rather than only analyzing aerial images. Furthermore, during my trip to New Zealand, I interviewed government workers and non-profit leaders and volunteered with a revitalization program, Project Twin Streams. The research for my case studies were possible from funding by the Mary Jo Read Fellowship (Geography Department at UWM) and the EPA Greater Research Opportunity (GRO) Fellowship.

Alumni News

Dr. Jonathan Hanes

Things have been very busy since I graduated last May! During the summer, my family and I moved to Marquette, Michigan and I began my position as an assistant professor at Northern Michigan University (NMU). When my first year comes to close in May, I will have taught four different courses at NMU (introduction to physical geography, introduction to environmental science, introduction to geographic research, weather and climate). During the summer I will teach an online introduction to environmental science course and in the fall I will teach a 400-level course that focuses on methods of vegetation analysis. In addition to teaching, I spent a good portion of this academic year working on a variety of writing and research projects. I am in the process of co-authoring a chapter on deciduous forest phenology (with Andrew Richardson and Steve Klosterman from Harvard) for the second edition of Professor Schwartz's phenology book. I am also editing, and contributing to, a book entitled "Biophysical Applications of Satellite Remote Sensing" that will be published by Springer in 2013. With regard to research, I recently received a grant from NMU to fund a research project that will investigate various feedbacks of forest phenology on the lower atmosphere and the relationship between field-based and satellite-derived measures of forest phenology. Currently, I am in the process of hiring two research assistants for this project, which will begin next fall. On a



personal note, my family welcomed Madeline Elizabeth Hanes into the world on December 4, 2011. She is our third child and second daughter. While I do enjoy many aspects of our new life in Michigan, Milwaukee and the Department of Geography at UWM will always be quite dear to me. I am thankful for the opportunities I've had to collaborate and correspond with Professor Schwartz and others in the department since leaving last May.

Dr. Sandra Zupan

Since completing a Ph.D. degree in 2010 I have worked as a lecturer at the University of Kentucky (UK). Part of my dissertation research has been published in Urban Geography. Also, Ryan Holifield and I are submitting a co-authored article to Political Geography. In Lexington, with support of UK College of Arts and Sciences grants I launched a new exciting project - Social Justice/Faith Groups, Urban Homelessness and Spaces of Praxis: Lexington's Catholic Action Center. This Lexington based research is part of my larger project examining how Catholic Worker Movement communities, a collection of over 100 houses of hospitality, address urban homelessness, poverty, and hunger through various forms of social and political engagement. Last month, I started a two-year term as a board representative of the AAG's Urban Geography Specialty Group.



Graduate Student News

Living *la vida loca*(l) in Las Vegas: Or, “what happens in Vegas...goes into a dissertation.”

Jeremy Sorenson

For the past month, I have been in the field in Las Vegas, sharing meals in Baker Park, and, well, just soaking myself in the culture of the city (and, yes, it does have culture). Beyond the glitz and excess of the Strip or the neon and inebriation of Fremont Street lies a city of 2 million people engaging in all sorts of struggles. These range from the food-sharing activist fighting a home foreclosure to the children growing up in a state with a 57% graduation rate to the Culinary Union locked into a media war with a local casino chain to the uninsured woman I talked to at a bus stop on her way to Guatemala to get dental work. Among its dubious honors is that Las Vegas has the 4th highest per capita amount of police shootings. It also has one of the highest unemployment and homelessness rates in the US. There's also a sort of cognitive dissonance in the air that's palpable. The official mythology that explains this city is one that tells a story of rugged, can-do people that came to the desert to build a city that shouldn't even be able to exist, let alone be so fabulous. This mythology dissolves upon riding any residential bus or seeing the locals playing video poker at the supermarket: people here just look tired and beat down.

But, to be in Vegas at this moment is to witness a city that's changing. Clark County (buttressed by local public opinion) is attempting to get the handbill passers banished from the Strip: they want it to be more family-friendly. The local philanthropic community recently opened the Smith Center for the Performing Arts downtown (as one local news story put it, “perhaps we've finally grown up”). A new downtown museum is dedicated to telling the story of many of those can-do people who built this improbable city: it was the mob.

And yet, I'm coming to hold this terribly wonderful place near to my heart. The incessant sunshine feels more than welcome on my Midwestern shoulders. The palm trees and the sand-colored mountains have made an indelible connection with me. I still can't get over the 5-for-99-cent price of avocados and the super cheap vegan chorizo at Cardena's supermarket. And then there's the everyday incongruities one inevitably sees here. It's an experience just beyond the everyday to walk down Las Vegas Boulevard on my way to the gym. It confounds the comfortable categorizations of “subculture” to witness this exchange between a heavily-inked, bearded biker-looking guy at a coffeeshop/record store near my apartment:

Cashier: And here's your change. Enjoy the Cosby.

Biker: [taking receipt of his just-purchased old-school Bill Cosby comedy records] Thanks, I will. [chuckles] I love Bill Cosby!

From ambling my way through becoming a “researcher” to just becoming “local,” this is proving to be very interesting...

Redevelopment in Action: The Riverworks Strategic Action Plan

Claire Reuning

Since this fall, I have interned as an assistant planner working on the Riverworks Strategic Action Plan at Milwaukee's Department of City Development (DCD). DCD completed its comprehensive Northeast Side Area Plan in 2009. From the plan's broad recommendations, DCD is in the process of, as my supervisor Long-Range Planner Janet Grau likes to say, “drilling down” to specific action steps for redevelopment in key geographic areas, like Riverworks.

The principal part of Riverworks stretches along Capitol Drive from Shorewood until I-43, and south to Keefe Avenue. Home to two Business Improvement Districts (BIDs), the main BID, #25, is one of the five industrial BIDs left in Milwaukee. Yet, with the retail along Capitol Drive, River-



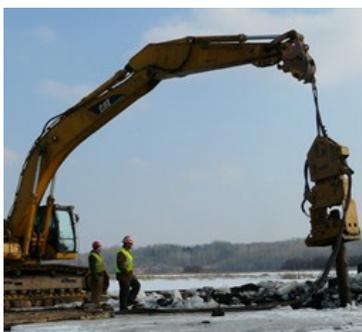
Streetscaping on Capitol Drive paid for by BID #25.

Source: DCD

Graduate Student News (cont'd...)

works' BID #25 is more than just industrial. Writing a strategic action plan that prioritizes industrial growth, while also supporting pre-existing retail use is a real world lesson in the challenges of integrating the local knowledge shared by area stakeholders and the expertise of city planners into one implementable document. Mediating the (frequent) conflicts between different people's vision for the future of Riverworks has been an interesting part of creating the strategic action plan.

Six months ago I couldn't have told you what a BID was. Now I not only know their purpose, I better understand the value of manufacturing districts and the challenges of integrating older districts into neighborhoods. By interning at DCD, I've seen the urban planning process unfold and it's been a great introduction to Milwaukee's economic development challenges.



Removing a 100+ year old piling from the Bay

Katie Williams

I've made several trips to Lake Superior this spring, to the St. Louis River between Duluth, MN and Superior, WI and the St. Mary's River between Sault Ste. Marie, MI and Ontario. Couple of observations - people may apologize that it is so warm when you go that far north in winter and there's little/no snow and

there are a lot more doughnuts in Soo Ontario than there are in Soo Michigan.

While up north, I've been attending meetings, press conferences and school group tours. It's been really interesting to see the different restoration projects and how citizens are connected to them.



Setting up a shot on the St. Louis River

Ryan Covington

I have most generously been selected to receive a UWM Distinguished Graduate Student Fellowship for the upcoming 2012-2013 academic year. The Fellowship will support my dissertation research on the Savannah Harbor Expansion Project, an intensely controversial environmental engineering project designed to deepen the Savannah River – the border shared by the states of Georgia and South Carolina. The controversy lies at the intersection of a number of critical debates in contemporary geographic scholarship, many centered on questions of how best to govern the human relationship to non-human nature. The Distinguished Graduate Student Fellowship will provide me the opportunity to undertake extensive fieldwork in the city of Savannah, working broadly on issues of environmental injustice in the ports surrounding neighborhoods. I am extremely grateful for all of the guidance, support, and (most of all...) patience of the faculty and my fellow graduate students as I have stumbled my way through developing my research project!

Joe Larson

Currently I'm in the initial stages of finishing my master's thesis. My work is an extension of an important study that my advisor, Dr. Mark Schwartz, completed back in 1995. It involves looking at changes in seasonal air mass distributions in the North Central United States (NCUS) as a basis for detecting climate change. Using the existing dataset from his study, and recent information from the NCDC, I plan to begin work on the analysis for my project this semester, and continue through the summer break.

I'm enthusiastic about this research, as I have always been interested in atmospheric science in general and recognize the importance of climatology. More specifically, it is rewarding to know that this rather unique research, in some small part at least, will contribute to understanding the causes of climate change in our region. I'm also fascinated by Dr. Schwartz's rather novel approach to the analysis, which integrates different methods of classifying air masses to produce more accurate results. Of course, I'm quite honored to be working alongside someone as prominent as him, and I look forward to contributing to his past research.

