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Message from the Chair

It is my pleasure to welcome you to a new volume of the department’s newsletter; of course it is always a pleasure to share some of the exciting happenings of the department when so many positive changes are occurring. We have been extremely fortunate over the past year in our hiring initiatives, as Dr. Camille Holmgren (biogeography, global change) came to us from California State University, Long Beach on a tenure track line, Dr. Vida Vanchan (economic geography, business applications in GIS) accepted a tenure track offer, and Dr. Charlotte Rohm, Climate Impacts Research Centre (CIRC), Sweden (soils, wetlands hydrology, global change) will fill the joint position with our department and the Great Lakes Center in the fall of 2008. Dr. Dan Howard from the Town of Amherst Planning Department has begun to teach urban geography and planning courses for us on a part time basis and Mr. Chesley McNeil, Meteorologist at WGRZ Channel 2 is teaching some of our meteorology courses.

Mrs. Jan Mazurek, well known to all reading this newsletter and a foundation for the department, retired in November after 37 years of service. Happily, she has agreed to continue with the department on a part time basis for a couple of years.

We opened a new water quality lab and are developing a biogeography lab, welcomed PhD scholars from China, the minor in Meteorology and Climatology is thriving, the minor in Understanding Community, Diversity and Peace was approved by the college, and we are in the process of developing a minor in GIS. Great changes over the past year, with the promise of an exciting future, as you will see in the following pages.

On a sad note, I regret to inform you of the passing of Captain John Freidhoff as a result of a diving accident in Lake Ontario at the end of October. John played such an important role in so many of our research projects and education initiatives, and helped so many of our undergraduate and graduate students, as a truly great friend and colleague he will be sorely missed.

Department News

Forecasting the Future: Climate Change Speaker Series
Stephen Vermette

The Intergovernmental Panel on Climate Change (IPCC) released their latest assessment on climate change. The Department of Geography and Planning responded by launching its own discussion to educate the Buffalo State Community on climate change issues. Clearly, climate change, more than any other issue, will affect every aspect of our life. This is especially true for our students.

In Spring’07, supported in part by the BSC Faculty/Student Association, a speaker/film series was organized, that included: a review of the science (Stephen Vermette); a skeptic’s perspective (Dr. Chris Walcek, SUNY Albany); an opportunity for students to learn how they may become involved (Western NY Climate coalition); and the screening of two movies - Al Gore’s An Inconvenient Truth, and Inuit Observations on Climate Change.

In Fall’07 a speaker series provided an opportunity to highlight our own department’s expertise with climate change, and to inform the campus community of our meteorology and climatology offerings. Topics included: an examination of the growing evidence of a changing climate (Stephen Vermette); a discussion on the reconstruction of past climates (Camille Holmgren); an examination of possible unusual and severe weather in our future (Chesley McNeil); and a look at how the Great Lakes and Western New York may be impacted by a changing climate (Gordon Fraser).

The future will present huge challenges for our students. Increasingly climatology is becoming a relevant discipline to the general public, and the Department of Geography and Planning is well positioned to offer relevant courses and research, and to provide the important connections to both the social and natural sciences.
Department News

Department Internet Mapping Server

Development of web-based mapping applications continues at Buffalo State. Dr. Wendie Mix and Mary Perrelli attended two ESRI training courses this summer in Philadelphia on ArcServer development and customization of applications using .NET. We encountered many technical difficulties installing the web mapping application software on our server. However, we are now able to begin to develop customized web sites that include interactive mapping capabilities.

Currently, there are two ArcIMS based applications running on the server. One presents five years of data on foreclosed properties that were auctioned by the City of Buffalo. The other is a demonstration application showing property timelines. Timelines show the sequence of events that occur at individual properties, including real estate transactions, foreclosure, bankruptcy, housing code violations, arson, and crimes. The site contains documentation on the databases used in the application and a brief tutorial on how to use ArcIMS.

http://geographyplanning.buffalostate.edu/TimelineOpenPage_new.htm

Students in the Community Planning course (PLN 412) this Fall helped develop a web site for a local neighborhood organization as part of their service learning activities. The site includes a map of the proposed Black Rock historic district and links to information on several historic properties within the district.

Dr. Mix is developing a web-based mapping course for undergraduates which will be part of the GIS minor.

Two New Labs!

Our lab capacity is expanding. New is a water quality lab in the Classroom Building that is used for instruction and research. The water quality lab includes colorimeters and numerous meters and kits to analyze a suite of metals, nutrients, bacteria and conventional parameters. The lab currently serves two research projects but it also provides work space and equipment for individual student projects and thesis work.

Our second new lab is located on the island of San Salvador, Bahamas (arguably, where Columbus first made landfall in the New World). While still under negotiation, our tropical lab is part of an adopt-a-lab MOU with the Gerace Research Centre (formerly known as the Bahamian Field Station). Monies for the new lab and equipment have been provided by Buffalo State and the SUNY Research Foundation. The tropical lab and purchased equipment will service our faculty and students involved with the Bahamas Field Course, as well as supporting individual faculty and student research. New export control laws and air travel weight limits restrict what can be brought to the island on any given field trip. Having the equipment waiting for us on the island and having access to trucks and boats will be invaluable.

Retirement Party

The department held a party for Mrs. Jan Mazurek in a box at the HSBC Arena on November 21, 2007 to celebrate her 37 years of service and retirement as a full time staff member of the department. Jan spent her entire career in the department – a remarkable accomplishment indeed! She has had an incalculable impact on our program, our students, and the college. She will work part time in the department over the next couple of years to ease the Chair’s anxiety about the start of a new staff member and then we hope that she and husband Frank will continue to pursue, even more vigorously, their travel plans. It was great to see emeritus and current faculty, students, and friends “in the box” and the evening was capped off by a Sabres 4-2 victory over the Ottawa Senators.
Dr. Irvine continues to work on the International Foundation for Science (IFS)/Swedish International Development Cooperation Agency (SIDA) project evaluating the role of Phnom Penh’s wetlands in sustainably treating sewage discharges to the Mekong/Bassac River system. In support of this project, Dr. Irvine obtained a Senior Research Fellowship from the Center for Khmer Studies that allowed him to stay in Phnom Penh for six weeks during the summer of 2007 (three Buffalo State students worked on the project for three weeks). Drs. Irvine, Vermette, and Graber Neufeld (Eastern Mennonite University) obtained funding from the National Science Foundation to take six undergraduates to Thailand and Cambodia in each of the next two years to work on research projects with local university faculty, students, and the NGO Resource Development International - Cambodia. The research will focus on wetlands treatment of wastewater and access to clean drinking water. Dr. Irvine also has started a collaborative project, headed by Dr. Jeff Richey, University of Washington (and funded by NASA) to evaluate primary productivity in the lower Mekong River and Tonle Sap Lake.


Stephen Vermette continued his research and education activities in Thailand and Cambodia. In January, working with Kim Irvine and Tao Tang, Stephen contributed to a workshop focusing on the analysis of large data sets. This workshop concluded research that was associated with the monitoring and mapping of drinking wells in Cambodia, as funded by the Conservation, Food, and Health Foundation. While in Cambodia, airborne particles were sampled and mapped in Phnom Penh. This work will be published and will serve as a basis for Joel Bernosky’s (recent graduate student) graduate research. Over the next two summers, working with Kim Irvine and Doug Graber Neufeld (Eastern Mennonite University), with funding from the National Science Foundation, Stephen will direct students on a summer undergraduate research experience focusing on sustainable sanitation and water quality in Cambodia and Thailand.

When not in Cambodia, Stephen finds himself underground, either working with Kim Irvine on a storm sewer project (funded by the EPA) developing...
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low-cost methods to assess illicit hookups, or monitoring temperature and relative humidity conditions in a Pennsylvanian cave – Laurel Caverns. Stephen’s other projects – Buffalo’s Lake Breeze and his Radar/Beach project – continue. Stephen also continues as Co-coordinator of the New York Geographic Alliance (NYGA). Stephen’s placed-based courses continue to be offered. Last spring Stephen took students to San Salvador, Bahamas, and this past fall students spent a long weekend exploring caves as part of Cavern Studies. Last winter Stephen again led students to Punxsutawney, Pa. to witness Phil’s prognostication.

Tao Tang conducted ground Lidar remote sensing and conventional survey of urban air particle pollution in Beijing for GIS spatial analysis and modeling in the summer of 2006 and 2007. He also led a field survey of baseline data of flow velocity and pollutant loadings in the Chaobai River watershed for spatial modeling in ArcGIS. These field activities were conducted in collaboration with researchers in China.

Field measurement of pollution in the river.

Using a new photogrammetric workstation, students in Dr Tang’s Remote Sensing and Mapping class (PLN 325) are able to process 3D landscape visualization works in their studies using aerial photographs.

Testing of Lidar survey of solid particles in the air.

Kelly Frothingham was on sabbatical during the fall semester. The main focus of her sabbatical was to expand her knowledge of human impacts on streams by looking at the literature on the impact of dam removal on stream geomorphology. She also proposed to develop an inventory of dams in Western New York in order to identify dams in the area that could be targeted for removal. She presented the dam inventory results at the Middle States AAG meeting in a poster entitled “Investigating the Impact of Dam Removal on Stream Channel Morphology—Step one: Creating an Inventory of Dams in WNY.” In working on her sabbatical project, Dr. Frothingham was re-directed back to streambank stabilization work and she has indentified some new research methods that she is currently exploring, like using the Bank Stability and Toe Erosion Model developed by the USDA.

Dr. Frothingham had a paper entitled “Evaluation of Stability Threshold Analysis as a Cursory Method of Screening Potential Streambank Stabilization Techniques” published in Applied Geography. She was also co-author on a paper with Amy Krueger, a graduate student working with Dr. Frothingham, published in the Geographical Bulletin.

Dr. Frothingham continues to be co-editor of the Middle States Geographer with Dr. Vermette. Thanks to the help of Mary Perrelli, PDFs of all the articles from the last three volumes of the journal can now be found on-line on the Department’s server (http://geographyplanning.buffalostate.edu/middlestates.htm). Articles from Volumes 28 through 36 will be scanned into PDF format and uploaded to the web site by a student Editorial Assistant working with Drs. Frothingham and Vermette. They hope to have that work done sometime during the spring 2008 semester. The next volume of the journal, Volume 40, will be available on-line in May 2008.

Spatial analysis of the air pollution particle distributions.

Students conduct 3D landscape model reconstruction on a pair of aerial photographs.

The number of dams located in seven WNY counties.
**Faculty News**

**Wende Mix** has kept busy developing new courses for a proposed minor in GIS. The new Advanced GIS course will be offered for the first time this spring. This class will further develop students understanding of spatial statistics and introduce them to programming in GIS. Another new course under development is a web-based mapping class. Students will explore how maps are being used on the Internet and investigate design issues important for communicating to broad and diverse audiences. Students will develop an interactive web mapping application using ESRI’s GIS Server and .NET software.

Dr. Mix continues to support a research effort in the Biology Department by providing spatial analysis of terrapins’ home range. She also served as a member of UB’s Real Property Information System workgroup.

With help from Dr. Marian Deutschman, acting director of the Community Partnerships Office at BSC, Dr. Mix has organized and hosted two transportation seminars on campus. The first meeting in May introduced regional stakeholders to BSC and the USDOT University Transportation Centers Program. Group discussion focused on identifying regional transportation issues after reviewing federal transportation issues. A follow-up survey of participants was conducted by the Community Partnerships program and Dr. Mix met individually with some stakeholders over the summer. At the second meeting, in October, Dr. Mix provided a summary of regional transportation issues identified by the group. A few examples of how other colleges and universities are providing research and education services to their local communities were provided. Dr. Mix concluded the presentation with an example of exploring transportation problems in non-transportation courses. Dr. Mix’s GEG 199 class (Computers in the Social Sciences) has conducted an analysis of Peace Bridge traffic data over the past four years, with special attention paid to the impact of Sabres home games on bridge traffic.

Dr. Mix continues to serve on the Friends of the Asarese-Matters Center. Her Spring Transportation Planning class conducted a survey of the Center’s customers to identify transportation needs. Other community service learning activities include working with the Black Rock Riverside GNPA on defining the Black Rock Heritage District. Students in the Community Planning class (PLN 412) researched topics in local, state, and federal historic preservation; collected background information on potential historic properties in Black Rock; incorporated historic and current information into a GIS application, and established a web site depository of all data collected.

**Vida Vanchan** published a paper in August of 2007 entitled, “Communication and relationships between industrial design companies and their customers,” in The Industrial Geographer Journal. This paper examines the nature of relationships and communication modes between US companies in the industrial design sector and their clients.

In Spring 2007, Dr. Vida Vanchan was awarded Individual Development funding to participate in the Annual Meeting of American Geographers in San Francisco, CA and to serve as panelist in two sessions about the Critical Regional Pedagogies of Southeast Asia and the Political Violence and Dissent in Southeast Asia.

In the summer of this year, Dr. Vida Vanchan and Dr. Kim Irvine gave a presentation to seniors at Baktouk High School in Phnom Penh, Cambodia, about Geography and their areas of research interests. They also provided supporting materials to faculty at the high school in order to enhance their students’ knowledge of geography.

**Camille Holmgren** joined the faculty in Fall 2007. She comes to us from the Department of Geography at California State University, Long Beach, where she was on the faculty for two years after receiving her doctorate from the University of Arizona. Dr. Holmgren’s research interests include Quaternary paleoecology, paleoclimatology, biogeography, and global change, and she is especially interested in understanding changing environmental conditions in arid environments from the last ice age until present. She uses macrofossils and pollen from packrat middens to reconstruct vegetation and climate dynamics, and her research has taken her to deserts in both the western United States and South America. She is also interested in how new techniques such as GIS-based bioclimatic models can be used to strengthen the inferences from the packrat midden record. Currently, she is working on a long-term vegetation history of the Mojave–Colorado desert ecotone at Joshua Tree National Park.
Faculty News

Camille Holmgren with a 13,500-year old packrat midden from the Chihuahuan Desert along the Arizona-New Mexico border.

Dr. Holmgren’s other activities included helping to organize the 2007 Association of Pacific Coast Geographers Annual Meeting, which was held in Long Beach, CA from Oct. 17-20. She also organized the session Climate Change: Past, Present, Future, and was a participant in a panel entitled Doing it All: Experiences of Female Junior Faculty in Physical/Environmental Geography.

Dr. Holmgren teaches courses in physical geography, climatology, biogeography, and global change.

Dr. Holmgren with students collecting packrat middens at Joshua Tree National Park.

William Wieczorek In addition to his role as Director of the Center for Health and Social Research (http://www.buffalostate.edu/centers/cshs/), Dr. Wieczorek is a Professor in the Department of Geography and Planning. He continues to collaborate closely with the department through a number of activities, such as mentoring majors for their senior research projects, acting as the department liaison for human subject ethics reporting, chairing the department’s personnel committee, and by offering special topics courses for graduate students. Two students in the major mentored by Dr. Wieczorek presented their senior research projects at the Buffalo State Student Research and Creativity Celebration. David DiGiacomo presented his research on the geography of alcohol availability and Gary Nelson presented a geographic analysis of the Bike Path Rapist. Xiao Wang, a graduate student, also presented his work with Dr. Wieczorek on implementing Second Life, a virtual reality platform, at this conference.

During the past year, Dr. Wieczorek has presented a number of papers at national and international conferences, worked with local government and community-based health agencies, and developed a number of new projects. In August, Dr. Wieczorek was appointed as a grant reviewer to the Behavioral Genetics and Epidemiology Review Group, which is a part of the National Institutes of Health Center for Scientific Review. In June he also reviewed applications for a joint National Institute of Justice-National Institute on Drug Abuse panel on drug markets in the US. On a local level, Dr. Wieczorek was appointed to the Erie County Department of Mental Health Commissioner’s advisory board.

Dr. Wieczorek’s publications over the past year include a coauthored chapter titled “Geography and Public Health” in the Encyclopedia of Information Science and Technology, and articles on risks for gambling problems, such as gambling availability, published in the journal International Gambling Studies. In the Fall of 2007 he coauthored another publication assessing a program designed to treat perpetrators of partner violence, which was published in the Journal of Interpersonal Violence.

In May he presented research on multilevel modeling and risky health behaviors by DWI offenders at the Interface Society Annual conference held in Philadelphia. The Interface Society focuses on issues at the interface of computing and statistics. In July, Dr. Wieczorek presented a paper on aggressive driving by DWI offender at the European Congress of Psychology held in Prague.

In the Fall of 2007, Dr. Wieczorek was awarded a grant from the National Institute on Alcohol Abuse and Alcoholism to study the initiation and continuation of drinking-driving behavior. The grant provides $3.1 million over the next five years to create models of drinking-driving that can be used to develop improved prevention and intervention programs targeted at drunken driving. One aspect of the project is to examine how to best include neighborhood and geographic factors in these models.

Dr. Wieczorek at the European Congress of Psychology in Prague
**Student News**

**Department Hosts Two Ph.D. Students from China**

We are pleased to welcome two Ph.D. students from the China Central University of Finance and Economics in Beijing for the academic year 2007-08. The students are here with the financial support from the China Scholarship Council and their visit has been coordinated by the Center for China Studies at Buffalo State. Both students are collecting data and information on comparative aspects of the U.S. and China.

Mr. Ren Huilin is working with Dr. Vida Vanchan and his main area of interest is metropolitan economy, with research focuses on the flow mechanism of production factors such as land, labor, capital, and technology. His thesis compares the Metropolitan Area Economy in United States with that of China, and it will provide some measures for the development of the flow mechanism of production factors in China.

Ms. Yan Lili is working with Dr. Kim Irvine and she is interested in the relationship between water usage and economic development and the implementation of economic valuations in water resource management. She also is comparing water management strategies in the U.S. and China.

**Middle States AAG**

A large contingent of faculty and students attended the annual meeting of the Middle States Division of the AAG in November. Drs. Irvine, Frothingham, Tang, and Vermette and Mary Perrelli took eight students on the road to Reading, PA to attend the meeting. Three of our undergraduate majors presented results from their research projects. Bill Maryniewski presented a poster on using web mapping to assess tree damage on campus and Joe Drakes and Kerry Kleinfeld presented a poster of their results from a storm water investigation on campus. Three graduate students also presented at the meeting. Joel Bernosky gave an oral presentation on mapping airborne particulates in Phnom Penh, Cambodia, Amy Krueger presented a poster on geomorphological and ecological conditions in stable versus unstable stream reaches, and Mary Jo Crance presented a poster on the influence of ice cover on stream flow and channel morphology. As usual, the Middle States meeting was both fun and educational for all who attended.

**Student Awards**

Please visit our web site to see a summary of awards presented last Spring to students in the Geography and Urban Planning Dept.

Heather Lewis accepting the Katheryne T. Whittemore Award
Alumni News

Thanks to all Alumni who responded to our newsletters. Here is a sample of what you have told us about your careers and lives.

Ted McInerney has recently been hired by KWQC-TV (Channel 6), a CBS affiliate out of the Quad Cities (located along the Illinois and Iowa border), as their weekend meteorologist. Ted graduated Spring’07 with a B.A. in Geography and a minor in Meteorology & Climatology. He completed an internship with WGRZ (Channel 2) in Buffalo. Ted was the recipient of our 2007 Meteorology Updraft Award. Ever since taking our Weather Forecasting course Ted has had his sights set on a career in broadcast meteorology. At one point in time Ted cornered the media market here at Buffalo State as an on-air meteorologist for BSC-TV, the voice of weather on WBNY radio, as well as his Campus Weather Forecast printed each week by the Record.

Ryan America is currently working for Earth Energy Consultants, in Lake View, NY. We offer oil and gas consulting services, mainly to the oil and gas industry, but also to environmental companies, investment and law firms, private landowners, schools, etc. I am a “geological GIS technician”, which involves spatially analyzing and mapping geologic trends in gas and oil producing formations. I also maintain our database of geologic well data and production history.

Erica Somogye writes: Since graduating from BSC with a Master’s degree in Environmental Research and Education, I first went to work for Bergmann Associates in their Rochester Office. More recently, I moved to an Associate Scientist position with Environmental Resources Management (ERM) in Pittsford, NY. ERM has been ranked as the top all-environmental consulting firm in the world for the fourth straight year (ENR, July 2007). My area of expertise has been in environmental remediation, geographic information systems (GIS), and environmental database management.

Jacob Pastwik joined Spotsylvania County, Virginia planning staff in late June, 2007. Born and raised in the Buffalo, New York area Jacob graduated Sweet Home High School in Amherst, NY in 1999. He received his Bachelors degree in Urban Planning from Buffalo State College (Buff State) in 2003, and Masters Degree of Urban Planning with a Specialization in Urban Design from the State University of New York at Buffalo (UB) in 2005.

For nine years throughout high school and college Jacob worked in a successful local nursery/ garden center in Amherst, NY “wearing many hats“. Following completion of his Masters Degree Jacob accepted a position in downtown Buffalo in the private sector to conduct audits on multi-family HUD Section 8 projects located throughout Upstate New York, a position in Urban Housing Management.

In Memoriam

Responsibility for a portfolio of roughly 40 properties scattered across upstate the position offered fairly frequent travel opportunities. Though he liked the job very much and believed it to have been a tremendous benefit to him professionally, Jacob now works on Spotsylvania County, Virginia’s Long Range Planning Staff as Planner I. Jacob writes that “He is happy to join Spotsylvania County Staff and views his decision to relocate to the area as a great opportunity to pursue his passion and educational interests in Urban Planning and design, to work with a friendly and knowledgeable staff, to continue my growth professionally, and to get some perspective from an area undergoing growth in population and development. It’s a real ground floor “founding father” type situation where you have much new urban growth pressures in an area characterized historically as rural in character, its a chance to set the framework for the future, the “bones” of this place as it develops urban character that will be with us for many generations to come.”

Captain John J. Freidhoff

We are sad to note the passing of Captain John J. Freidhoff as the result of a diving accident on Lake Ontario, October 19, 2007. Perhaps it is fitting that as in life, John’s passing occurred while helping someone else on the lakes, as he was recovering lost sampling equipment for SUNY Brockport. He was a great friend and colleague and his positive approach to all challenges, his sense of humor, his scientific and technical skills, and his keen interest in student welfare will be deeply, deeply missed. John began at Buffalo State as boat captain and field station manager for the Great Lakes Center in 1994. John also was a Lt. Commander with the Coast Guard Reserve and he held numerous certifications, including Hazmat technician, emergency medical technician, black water scuba diving, commercial vessel boarding officer and inspector, pollution investigator and facility inspector. John is survived by his wife and four children.

Mike Goehle, Captain John, Erica Somogye, and John Fulford working on an inner harbor floatables project. Captain John, as always, is smiling, even when dodging ice on the harbor.

Alumni: We want to hear from YOU. Please send us a note or email to let us know what you are doing.

Please feel free to send any comments or questions to our Newsletter Editor, Dr. Wende Mix, at mixwa@buffalostate.edu