A MESSAGE FROM THE CHAIR

By Bob Pavlowsky

James C. Knox, 70, Evjue-Bascom professor emeritus of Geography at the University of Wisconsin-Madison, died suddenly of heart failure at his home in Madison on October 6, 2012.

Jim’s passing was a big shock to me and I think to most of us. Over the year or so prior, Jim convened with some colleagues and past students to celebrate his recent retirement at meetings of both the GSA in Minneapolis and the AAG in New York. A variety of papers in multiple sessions were presented in honor of Jim’s contributions to geomorphology and to thank him for how he influenced our development as physical geographers. Jim was at his best, mixing scholarly questions and comments about the presentations with humorous anecdotes about his field experiences, often about individuals present in the room. It was hard at that time to imagine that Jim would not out live us all.

We owe a big thanks to Jim and others for providing the enthusiasm and scholarship to form the GSG in 1981. Indeed, over the past 32 years, eight of Jim’s past students, myself included, served as chair of the specialty group. I have my own story about October 6, 2012. I was sitting down in Springfield, Missouri to watch the Wisconsin Badgers play Illinois in football at Camp Randall stadium in Madison, realizing later that it was only several hours before his passing. During the pre-game report, ABC had cameras at the entrances monitoring the arrival of the fans. Who did I see on the TV screen going to the game? I saw a smiling and excited Jim, of course—always a Badger.

The remainder of the chair’s message is an obituary for Jim Knox I compiled with minor editing from others’ published by the University of Wisconsin-Madison Foundation and AAG Newsletter, also including some comments by Dick Marston at Kansas State University.
During his 43 years as a faculty member at UW-Madison, Dr. Knox’s research transformed the field of fluvial geomorphology, opening new avenues that linked his field to broader contemporary environmental issues. To tens of thousands of students, he was a much-loved teacher, explaining not only how streams and soils work, but why we should care about them.

James C. Knox was born in Platteville, Wisconsin on Nov. 29, 1941. His early experiences made him a firm believer in the Wisconsin Idea, and in the value of research and teaching at the University of Wisconsin to the people of the state. Jim earned a BS from UW-Platteville in 1963 and PhD at the University of Iowa in 1970. He came home to Wisconsin to take a faculty position at UW-Madison in 1968.

The hills and valleys of Wisconsin’s Driftless Area served as Jim’s “laboratory.” He carried out some of his best known work near the Grant County farm where he grew up, inspired by the winding streams and the glacial history of the Quaternary Period. Employing methods ranging from stratigraphy to geochemical analysis to the extraction of information from early land surveys—an approach he pioneered—Knox helped advance process-based approaches in geomorphology, even as he demonstrated how studies of earth-surface processes could yield insights into climate change—past, present and future.

Jim’s “biogeomorphic response model” published in 1972 provided a conceptualization of the timing and complexity of responses of vegetation, erosion, and sediment production to simple climate changes. This model has been widely reproduced in subsequent books and papers on geomorphic impacts of climate change.

In publications spanning the 1970s and 1980s, Jim pioneered new “watershed-scale” concepts about how stream channels and floodplains respond to and recover from historical land use disturbance based on flood regime, sediment load, and stream relationships that varied downstream over time. To detect the effects of land use change, he used metal contamination from 19th century lead and zinc mining as a tracer, showing that the rates of soil erosion and sedimentation on floodplains increased dramatically as forest or prairie was turned into farmland.

Another of Knox’s major contributions was in documenting the sometimes-dramatic changes in the magnitude and frequency of floods and the behavior of streams during the Holocene. His widely cited 1993 paper in the journal Nature demonstrated that, over the past several thousand years, even modest changes in climate caused large changes in the frequency of large floods along Driftless Area streams.

Knox also played an important role in encouraging the developers of climate models to compare their simulations of past climates with data from the field. Recent contributions focused on understanding the influence of climate changes on flood and sediment regimes throughout the Upper Mississippi Valley including the main stem of the Mississippi River. Over his career, Jim’s research was supported by numerous grants from the National Science Foundation. He has been recognized with awards including the 2007 AAG Presidential Achievement Award and 2012 AAG Lifetime Achievement Award.

Knox’s impact on physical geography and geography in general goes far beyond the extraordinary contributions of his scholarship. There is likely no living physical geographer who has produced more students who have gone on to assume positions of influence in the discipline than Jim Knox—so much so that one often hears reference to the “Knox School.” His pedagogic influence extends well beyond graduate education: he is widely known as an enthusiastic, demanding, and caring teacher who has sparked the interests of countless undergraduates through the years, including many who went on to pursue graduate work in geography. Always happy to explain his work to the public in other venues, he was featured in a PBS program on floods in the Mississippi River basin.

Despite the time he spent on research and teaching, Jim rarely, if ever, turned down requests for service. He chaired his department and the University’s Physical Sciences Divisional Executive Committee, among others. Nationally, he was a councilor of the Association of American Geographers and the American Quaternary Association, chair of Section E (Geology and Geography) of the American Association for the Advancement of Science, and chair of the Quaternary Geology and Geomorphology Division of the Geological Society of America. He was a member of numerous panels and advisory boards of the National Science
Foundation and an associate editor of several leading journals in geography and earth science.

Jim was proud to be a Geographer and published his benchmark articles in the Annals of the Association of American Geographers, presented countless papers at the AAG national meetings, and served the AAG in numerous capacities. His rapport and cooperation with other scientists--through participation in the International Quaternary Association, American Quaternary Association, and the Geological Society of America--have been extremely important to building collaborations and mutual respect between geography and cognate disciplines nationwide.

At a memorial service for Jim in Madison on October 12th, Joe Mason, professor of geography at UW-Madison said this about Jim: "As his colleagues, we knew him as a model citizen of his department, university and profession. He was always willing to dedicate his time, good nature and common sense to work for the greater good." Mason also mentioned that "in recent decades, Jim told me, he often helped his brother with work on the family farm, once noting that he had gone from putting up hay one afternoon to sitting on a National Science Foundation advisory panel in Washington the next day."

Although he had retired in 2011, he continued to work in the department in Science Hall. Knox is survived by his wife Kathy and daughters Sara and Lezlie, all dedicated educators like himself.

GSG AWARDS

Melvin G. Marcus Distinguished Career Award

2012: David R. Butler. (Texas State University). Citation by George P. Malanson.

2013: Michael (Mike) Woldenberg. (University at Buffalo / SUNY Buffalo). Citation by Frank Magilligan.

G.K. Gilbert Award for Excellence in Geomorphological Research


2012 AAG Best Student Paper Awards

Andrew DeWitt, MS Student, Department of Geology, Geography, and Planning, Missouri State University, for his presentation "Channel Morphology Regime Equations for the James River, Southwest Missouri Ozarks"

John Gartner, PhD Student, Department of Earth Science, Dartmouth College, for his presentation, "Dam Removal on the Ashuelot River, New Hampshire: a natural scale experiment in sandy and coarse-grained channels"

2012 AAG Wolman Graduate Student Research Awards

Mitchell Fyock, MS Student, University of Montana, Assessing the Use of Existing Geomorphological Mapping Systems for High Mountain Environments in the United States

Rebecca Manners, PhD Student, Utah State University, Multi-Scalar Geomorphic and Vegetative Feedbacks in the Colorado River Basin

CONFERENCES

GSG Sponsored Sessions at the Los Angeles 2013 AAG

Be sure to attend the Taylor-Francis/Routledge Distinguished Lecture on Geomorphology and Society given by Tom Dunne, scheduled on Friday, 4/12/2013, from 12:40 PM - 2:20 PM in Grand Ballroom Salon 4, The LA Hotel, Level 2
Tuesday, 4/9/2013

1136 Environmental Change and Human Adaptation in High Asia (I) is scheduled on Tuesday, 4/9/2013, from 8:00 AM - 9:40 AM in Laguna Parlor 3044, Westin, 30th Floor

1236 Environmental Change and Human Adaptation in High Asia (II) is scheduled on Tuesday, 4/9/2013, from 10:00 AM - 11:40 AM in Laguna Parlor 3044, Westin, 30th Floor

1420 Fluvial Legacies: Enduring Influences of Channel Changes is scheduled on Tuesday, 4/9/2013, from 12:40 PM - 2:20 PM in Sacramento, Westin, Level 2

1520 Progress in Physical Geography Session: Missing Links is scheduled on Tuesday, 4/9/2013, from 2:40 PM - 4:20 PM in Sacramento, Westin, Level 2

Wednesday, 4/10/2013

2134 Riparian Zones: Aquatic and Terrestrial Interactions is scheduled on Wednesday, 4/10/2013, from 8:00 AM - 9:40 AM in Laguna Parlor 3024, Westin, 30th Floor

2230 Human Impacts on Watershed Processes is scheduled on Wednesday, 4/10/2013, from 10:00 AM - 11:40 AM in Santa Monica D, Westin, Level 3

2234 New Perspectives to Paleoenvironmental Change and Geoarchaeology I is scheduled on Wednesday, 4/10/2013, from 10:00 AM - 11:40 AM in Laguna Parlor 3024, Westin, 30th Floor

2430 Fluvial Geomorphology I is scheduled on Wednesday, 4/10/2013, from 12:40 PM - 2:20 PM in Santa Monica D, Westin, Level 3

2434 New Perspectives to Paleoenvironmental Change and Geoarchaeology II is scheduled on Wednesday, 4/10/2013, from 12:40 PM - 2:20 PM in Laguna Parlor 3024, Westin, 30th Floor

2530 Fluvial Geomorphology II is scheduled on Wednesday, 4/10/2013, from 2:40 PM - 4:20 PM in Santa Monica D, Westin, Level 3

2534 New Perspectives to Paleoenvironmental Change and Geoarchaeology III is scheduled on Wednesday, 4/10/2013, from 2:40 PM - 4:20 PM in Laguna Parlor 3024, Westin, 30th Floor

2630 Fluvial Geomorphology III is scheduled on Wednesday, 4/10/2013, from 4:40 PM - 6:20 PM in Santa Monica D, Westin, Level 3

Thursday, 4/11/2013

3107 Advances and Challenges in Digital Elevation Models I (Overview) is scheduled on Thursday, 4/11/2013, from 8:00 AM - 9:40 AM in Palos Verdes, Westin, Lobby Level

3207 Advances and Challenges in Digital Elevation Models II (Coastal) is scheduled on Thursday, 4/11/2013, from 10:00 AM - 11:40 AM in Palos Verdes, Westin, Lobby Level

3407 Advances and Challenges in Digital Elevation Models III (Geomorphology) is scheduled on Thursday, 4/11/2013, from 12:40 PM - 2:20 PM in Palos Verdes, Westin, Lobby Level

3507 Advances and Challenges in Digital Elevation Models IV (Remote Sensing) is scheduled on Thursday, 4/11/2013, from 2:40 PM - 4:20 PM in Palos Verdes, Westin, Lobby Level

3623 Advances and Challenges in Digital Elevation Models V (Illustrated Paper) is scheduled on Thursday, 4/11/2013, from 4:40 PM - 6:20 PM in San Jose, Westin, Level 2

Friday, 4/12/2013

4455 Taylor-Francis/Routledge Distinguished Lecture on Geomorphology and Society is scheduled on Friday, 4/12/2013, from 12:40 PM - 2:20 PM in Grand Ballroom Salon 4, The LA Hotel, Level 2. Speaker: Tom Dunne

4537 Aeolian Processes and Landforms is scheduled on Friday, 4/12/2013, from 2:40 PM - 4:20 PM in Laguna Parlor 3048, Westin, 30th Floor

4637 Aeolian Processes and Landforms II is scheduled on Friday, 4/12/2013, from 4:40 PM - 6:20 PM in Laguna Parlor 3048, Westin, 30th Floor

4828 Geomorphology Specialty Group Business Meeting is scheduled on Friday, 4/12/2013, from 7:30 PM - 8:30 PM in Santa Monica B, Westin, Level 3

Saturday, 4/13/2013

5123 Global environmental changes in mountain land-water-scapes is scheduled on Saturday, 4/13/2013, from 8:00 AM - 9:40 AM in San Jose, Westin, Level 2

5223 Global environmental changes in mountain land-water-scapes is scheduled on Saturday, 4/13/2013, from 10:00 AM - 11:40 AM in San Jose, Westin, Level 2

5423 Coastal Geomorphology is scheduled on Saturday, 4/13/2013, from 2:00 PM - 3:40 PM in San Jose, Westin, Level 2
5523 Legacy Sediment in the New World is scheduled on Saturday, 4/13/2013, from 4:00 PM - 5:40 PM in San Jose, Westin, Level 2

2013 AAG-GSG Student Paper Competition
Update from Awards Chair Chris Renschler

PhD Student Competition Schedule

Wednesday 4/10/2013:

1. PhD - Michael D. Luehmann - Michigan State University, #2176 Geomorphology and Physical Geography starting at 8:00 AM. Time and Location: 8:20 am in Grecian, Biltmore.

2. PhD - Derek J. Martin - University of Tennessee, #2134 Riparian Zones: Aquatic & Terrestrial Interactions starting at 8:00 AM. Time and Location: 9:00 am in Laguna Parlor 3024, Westin, 30th Floor

3. PhD - Katie H. Costigan - Kansas State University, Department of Geography, Paper Session: Fluvial Geomorphology III starting at 16:40 PM. Time and Location: 5:20 pm in Santa Monica D, Westin, Third Floor

4. PhD - Sarah Praskievicz - University of Oregon, #2630 Fluvial Geomorphology III starting at 16:40 PM. Time and Location: 5:40 pm in Santa Monica D, Westin, Third Floor

Friday 4/12/2013:

5. PhD - Kathryn Nora Barnard - Portland State University, #4124 Geography of Wine -- New World 1 starting at 8:00 AM, Time and Location: 8:30 am in Avalon, Westin, Third Floor

6. PhD - Christy Swann - Texas A&M University, #4537 Aeolian Processes and Landforms starting at 14:40 PM, Time and Location: 3:20PM in Laguna Parlor 3048, Westin, 30th Floor

MA/MS Student Competition Schedule

Wednesday 4/10/2013:

7. MA - Genevieve Munsey* - San Francisco State University, #2430 Paper Session: Fluvial Geomorphology I starting at 12:40 PM. Time and Location: 2:00 PM in Santa Monica D, Westin, Level 3

Saturday 4/13/2013:

8. MS - Jay C Guarneri* - University of Arkansas at Monticello, #5508 Environmental Change: Remote Sensing starting at 16:00 PM. Time and Location: 17:00 PM in San Bernadino Room, Westin Bonaventure

OTHER MEETINGS

Binghamton Geomorphology Symposium by Jonatahan Phillips

The 2012 BGS was convened at Snow King Resort in Jackson, Wyoming, from 21-23 September, organized by Carl Legleiter (University of Wyoming) and Richard Marston (Kansas State University). The theme of the 2012 BGS was “The Field Tradition in Geomorphology.” 114 people registered for the meeting, which included two day-long field trips, a western style barbecue with Jack Vitek as keynote speaker, six invited papers, 11 invited posters, and 35 contributed posters. The first field trip focused on “the Modern Snake River in Jackson Hole,” led by Jack Schmidt, Richard Marston, Carl Legleiter and Suzanne Erwin. Discussions were held at several stops on hydrologic and geomorphic changes in the river and how those changes had affected riparian vegetation. The second field trip covered Quaternary Geomorphology and Glacial History of Jackson Hole” and was led by retired USGS geologists Ken Pierce and John Good. Costs of the meeting were underwritten by a
grant from the NSF-GSS and NSF-GLD programs, University of Wyoming, University of Oregon, and Kansas State University.

The 2013 BGS will convene 18-20 October 2013 at the New Jersey Institute of Technology in Newark, NJ. The theme for the 2013 BGS is "Coastal Geomorphology and Restoration." Organizers for the 2013 BGS are Nancy Jackson (jacksonn@njit.edu), Karl Nordstrom, William Smith, and Rusty Feagin.

The 2014 BGS will have the theme "Planetary Geomorphology." Dates and location TBA. Organizers for the 2014 BGS are Devon Burr (dburr@utk.edu), Alan Howard, and Doug Jerolmack.

The 2015 BGS will convene 18-20 September 2015 at the University of Buffalo in Buffalo, NY. The theme for the 2015 BGS is "Laboratory Experiments in Geomorphology." Organizers for the 2015 BGS are Sean Bennett (seanb@buffalo.edu), Peter Ashmore, and Cheryl McKenna Neuman.

If you are interested in organizing a Binghamton Geomorphology Symposium, please contact the Chair of the Steering Committee, Jonatahan Phillips (jdp@uky.edu).

44th 2013 Annual Binghamton Geomorphology Symposium
by Nancy Jackson

The theme of the 44th Binghamton Geomorphology Symposium (BGS) is Coastal Geomorphology and Restoration. The symposium will be held at New Jersey Institute of Technology, Newark, NJ, on October 18-20, 2013 and will include oral presentations by 18 invited participants across three sessions. The first session will examine the response of barriers, beaches and dunes to episodic events. The second session will examine geomorphic and biologic processes and interactions in beach and dune systems. The last session will focus on management and restoration practices, with attention on the ability of these practices to maintain or enhance landform and ecosystem functions.

A poster session will be organized for October 19th. The poster session is open to all geomorphic-related research. The first call for abstracts will be announced in January 2013.

A one-day field trip will be conducted on October 18th to compare and contrast landforms and habitats on high and low energy shores under developed and undeveloped conditions on the coast of New Jersey. Details and updates are posted to the website (http://web.njit.edu/~jacksonn).

PROGRAMS

Geomorphology Graduate Studies at the University of South Carolina

Opportunities for graduate students studying geomorphology thrive at the University of South Carolina (USC) Geography Department. The department has several physical geographers on the faculty, a complex of three laboratories devoted to the study of landforms and related fields, direct links and on-going interactions with a dynamic program in geospatial analysis with abundant lab and software resources within the department, and strong ties with several geomorphologists and hydrologists in programs across campus. The geomorphology faculty have research interests in river science, coastal science, aeolian geomorphology, environmental management, anthropogeomorphology, surface hydrology, and GI-Science applications to geomorphology.

The department is a long-standing PhD-granting institution with very high rankings on the 2010 National Research Council’s assessment of quality for Geography PhD programs in the USA. The University (USC) has more than 28,000 students and a nationally ranked library system. Columbia—as the capital of South Carolina and home of USC—is an excellent place to live with a cosmopolitan urban culture, low cost of living, and abundant rivers, wetlands, dunes, shorelines, gullies, and all things geomorphic to study. It is a short hop to the coast or the mountains.

Our Introduction to Landforms course is now recognized across campus for laboratory science credit, and we recently quadrupled enrollments by expanding course offerings to every semester and double the number of lab sections per semester. This has created a large new demand for lab instructors in geomorphology who receive full funding and coverage of tuition as teaching assistants. If you are an aspiring young geomorphologist looking for a graduate program where you can avoid student loans by working your way through your thesis or dissertation research as a teaching or research assistant, we may be just the answer. If interested, you can find more about the department on our main website: http://artsandsciences.sc.edu/geog/

the graduate student application website: https://www.applyweb.com/apply/uscgrad/

or don’t hesitate to contact us.

Allan James (AJames@sc.edu)
Jean Ellis (Jtellis@sc.edu)
PUBLICATIONS

Mima Mounds: The Case for Polygenesis and Bioturbation
Edited by Jennifer L. Horwath Burnham and Donald L. Johnson

Geological Society of America (GSA) Special Publication 490, "Mima Mounds: The Case for Polygenesis and Bioturbation," is now in press, and will be available in late October or November (advanced typeset cover attached). Purchase cost is not yet known (GSA is non-profit; they’ve yet to list it on their “GSA Pubs” website, but should be posted shortly).

Producing the volume involved many years’ work added to enormous ‘labor of love’ efforts by contributors, editors and referees dedicated to bring polygenic-biogenic points of view embraced by solid scientific standards to a topic too long buffeted by controversy—the origin of mima-pimple-prairie-natural mounds.

Contents include:

Introduction: 1
Overview of concepts, definitions, and principles of soil mound studies
Donald L. Johnson and Jennifer L. Horwath Burnham

1. Using LIDAR to model Mima mound evolution and regional energy balances in the Great Central Valley, California 21
Sarah Reed and Ronald Amundson

2. “Pimple” mound microrelief in southern Saskatchewan, Canada 43
L. Lee-Ann Irvine and Janis E. Dale

3. Alpine and montane Mima mounds of the western United States 63
George W. Cox

4. The biodynamic significance of double stone layers in Mima mounds
Jennifer L. Horwath Burnham, Donald L. Johnson, and Diana N. Johnson 71

5. The forgotten natural prairie mounds of the Upper Midwest: Their abundance, distribution, origin, and archaeological implications
Fred A. Finney 85

6. The polygenetic origin of prairie mounds in northeastern California 135
Donald L. Johnson and Diana N. Johnson

Geomorphology
Update from Dick Marston

2012 marks the 25-year anniversary of the Elsevier journal, Geomorphology. It is now published 24 times per year, with over 4600 pages scheduled for 2012. The three co-editors-in-chief are Richard Marston, Andy Plater (U.K.), and Takashi Oguchi (Japan). The senior editor for special issues in the Americas is Jack Vitek and for the rest of the world is Adrian Harvey. The book review editor is Dave Butler. The editorial board is comprised of 62 members from around the world. A total of 55,675 pages have been published since the first issue in July 1987. 108 special issues have been published, including the nine below for 2012 (through 15 November).

100. Volcano Geomorphology: Landforms, Processes, and Hazards
102. Thresholds for Storm Impacts along European Coastlines
103. Geomorphology of Large Rivers: Cases from the 7th IAG, Melbourne
104. Advances in Permafrost and Periglacial Research in Antarctica
105. Zoogeomorphology and Ecosystem Engineering
106. Meandering Channels
107. Techniques for Analyzing Late Cenozoic River Terrace Sequences
108. Sedimentary fluxes and budgets in natural and anthropogenically modified landscapes – Effects of climate change and land-use change on geomorphic processes

The 2-year Impact Factor is 2.52, an all-time high for the journal, which places it very high among Geology journals. The 5-year Impact factor = 2.879. The number of manuscripts being submitted to the journal continues
to grow at a high rate and will exceed 600 for 2012. Over 800,000 full-text articles are downloaded from the journal worldwide via Elsevier's Science Direct website. The rejection rate for manuscripts is approximately 50%. It is now possible to publish Open Access articles in *Geomorphology* by simply selecting the sponsored article option after your acceptance. See [http://www.journals.elsevier.com/geomorphology/how-to-publish-open-access/](http://www.journals.elsevier.com/geomorphology/how-to-publish-open-access/). At the journal website one can find a list of the "Most Downloaded Articles" and another list of the "Most Cited Articles." The quality of reviews has never been better. In addition to regular articles, we are now encouraging submission of review articles. Please contact one of the co-editors-in-chief if you are interested in submitting a review article on your favorite topic.

**Articles…**


**OTHER NEWS**

**Richard Marston** has been awarded the 2013 Meredith F. Burrill Award by the Association of American Geographers. The AAG Burrill Award honors "...work of exceptional merit and quality that lies at or near the intersection of basic research in geography on the one hand, and practical applications or policy implications on the other." The citation reads: Dr. Marston's research has had a profound impact on academic geography, especially in explaining the relative roles of natural and human disturbance in altering river and mountain landscapes, and the application of this work to guide environmental management and policy. Dr. Marston’s appointment as a Jefferson Science Fellow at the U.S. State Department is a testament to his remarkable accomplishments and long-term commitment to merging basic research with public policy. The Committee also recognizes Dr. Marston’s lifelong service in improving the visibility of geomorphology and his role as an ambassador for the value of geographic knowledge within academia as well as the public sector.
Geomorphorum is issued twice a year by the Geomorphology Specialty Group of the Association of American Geographers. The purpose of this newsletter is to exchange ideas and news about geomorphology, and to foster improved communication within our community of scholars. The editor of Geomorphorum welcomes news, comments, and suggestions from all members of the geomorphological community. Issues of Geomorphorum are posted on the website of the GSG; new issues are announced through the Geomorphlist listing service currently maintained by Chris Houser at Texas A&M University.