GEOMORPHORUM

Newsletter of the Geomorphology Specialty Group of the Association of American Geographers

2014 Fall / Winter, Issue No. 2 **Chris S. Renschler, Editor**

TABLE OF CONTENTS

http://www.aag-gsg.org/geomorphorum.shtml

A MESSAGE FROM THE CHAIR

By Chris S. Renschler

Dear AAG GSG Members,
Dear Geomorphology Friends,

It is my honor to serve you as specialty group chair for this 2014/15 season. To all of you and the spouses, families, students, colleagues and friends that support you in your profession and passion, I send my best wishes for a successful and healthy 2015!

As this year's chair, I also took the opportunity and liberty to make some slight modifications that I believe would enable us to raise the profile of our specialty group around the globe. I feel quite a responsibility to do this job and hope to do it well. Thinking about it over the past years and especially in this first half of my tenure as chair, I wondered how we as a team of specialty group officers could operate more efficiently. This would enable our leadership team to better serve you, geomorphology friends of other AAG specialty groups (e.g. physical geography topic areas), but also the non-AAG geomorphology community.

One of the most important issues was for me to keep us all and especially the next generation of young geomorphologists informed, engaged and excited. As of the end of 2014, our specialty group count was 266 members and 111 were registered as students. Those numbers have been higher in the past and it would be good to think about recruiting more student members and colleagues that left the AAG or have never been a member.

The **new GSG co-sponsored Physical Geography Symposium at the upcoming AAG in Chicago** is such an opportunity. I would like to thank Julie Winkler, Carol Harden and Dick Marston for their efforts in helping to set up this new and exciting symposium (you can read more about this event and a special invitation by Julie Winkler in the newsletter). I wanted to make sure that the GSG chair organized events are in coordination with this symposium. Therefore I requested to have our business meeting on the evening of the Physical Geography Symposium (Thursday) and our "Distinguished Lecture on Geomorphology and Society" scheduled to be in the same room right after the noon-time "Conversation on the Future of Physical Geography" (Friday). If the membership likes that idea and everything works well this could be a pattern. One could potentially integrate the often discussed GSG student poster competition as part of this sequence.

The GSG will again sponsor or co-sponsor a number of special paper sessions at the 2015 Annual Meeting in Chicago, Illinois. The GSG will also feature the Taylor-Francis/Routledge Distinguished Lecture on Geomorphology and Society, which is generously supported by Taylor-Francis/Routledge, Inc. In addition, I also would like to thank our new sponsors - Whiley and Elsevier - for supporting our GSG activities through ads in our newsletter.

That brings me to the next topic of concern: How to improve the **Geomorphorum**. In addition to the AAG GSG or Geomorph-L list-serve mailings, Geomorphorum is a key component on how we communicate. We are all very busy and submitting contributions (and editing) the newsletter is often the last thing on our mind. With the frequent change in solely responsible editorship from year to year, things can get delayed or even missed easily.

Therefore I proposed to add to the GSG chair's responsibility co-editorship of Geomorphorum and to have fixed deadlines similar to the ones we established for the awards over the past years: **February 15 and March 1 are the deadlines for nominations/submissions for the career and student awards, respectively** (see more in the section on the upcoming AAG in Geomorphorum).

Like the award deadlines, everyone should know the submission deadlines and publication of the newsletter: to keep things easy, I propose a **January 1 and June 1 deadline and publication of the Geomorphorum no later than that month**. Just before and after those dates there are usually no lectures and one is either getting ready for the next AAG in a couple of months or one is wondering what happened at the AAG a few weeks back (that means you can actually catch up via the Geomorphorum on a missed AAG GSG business meeting with the minutes, announcements as well as the awards citations/nominations and acceptance speeches – we usually get those more than half a year later and they are there forever in the archives!). I would also like to note that June 1 is also the change from the responsibilities of the past secretary-treasurer/editor to the new chair (and now co-editor to assist the new incoming editor). All this would allow more up-to-date information and continuity via the Geomorphorum.

I would like to add that our past **Dues to the IAG** have been paid. At the 2015 AAG Business meeting we will discuss a permanent solution to pay for the US dues that ideally should be shared among the AAG, GSA and AGU.

Please forward the URL to this newsletter and invite your students and geomorphology friends to attend local, regional and national events like the AAG meetings, the ever exciting Binghamton Geomorphology Symposium and it's field trip, or to come along on class field trips … or just a walk.…

Cheers,
Chris.

REVIEW: THE 2014 AAG IN TAMPA, FL – APRIL 8-12 2014

2014 BUSINESS MEETING MINUTES

By Chris S. Renschler

Convention Center, Tampa, Florida
April 10, 2014, 7:30 pm

Melinda Daniels (Chair)
Chris S. Renschler (Secretary-Treasurer)
Donald A. Friend (Awards Committee Chair)
Mike Urban (Webmaster)

I. Call to Order

The Chair called the meeting to order at 7:35 pm and welcomed everyone for the 33rd year of the GSG Business Meeting at the Annual Meeting of the AAG.

II. General Announcements

A. Specialty Group Chairs Meeting

The 2014 AAG attendance is down to somewhat more than 6,000 geographers. (NYC=8500 & Seattle=7600). The GSG had 25 sponsored sessions.

A total of **25 GSG sponsored or co-sponsored sessions** demonstrated our active membership at our annual meetings. The topics ranged from River Observations, Monitoring, and Management, a variety of issues about Advances and Challenges in Digital Elevation Models to several Geoarchaeology sessions. The topic Natural and Human Structuring of Rivers and other Geomorphic Systems as well as the sessions on Human Impacts on Watershed Processes are always well received. Classic topics such as Coastal and Aeolian Processes and Landforms and Fluvial Forms and Processes were also organized. Not to forget to mention the Geomorphology, Hazards, and Vulnerability session as well as another on Watershed Policy and Politics Responding to extreme weather events.

B. Taylor/Francis Routledge Distinguish Lecture

A major highlight of the GSG activities during this past AAG Meeting in Tampa was the **Taylor-Francis/Routledge Distinguished Lecture on Geomorphology and Society** presented by **William L. Graf, University of South Carolina.** Will's lecture "Science, Policy, and Politics for Restoration of the Florida Everglades" as well as the many special sessions on this topic were well attended. The chair and the audience thanked Will for his presentation and the sponsor Taylor/Francis Routledge for their financial support. Thank you all all for attending and/or presenting to make this the GSG event of the 2014 AAG.

C. GSG Involvement in Regional Meetings

The AAG would like to see more engagement of members and specialty groups at the regional meetings.

D. Progress in Physical Geography at AAG

There is an attempt to have a Physical Geography Symposium next year. Target Specialty Groups that should participate are 1) Geomorphology 2) Hydrology 3) Climatology and 4) Biogeography.

III. Specialty Group Reports

A. Approval of the Minutes

The 2013 GSG BUSINESS MEETING MINUTES New York, February 27, 2012 (as posted for review in the 2014 Spring Geomorphorum newsletter on the GSG website; submitted by Robert T. Pavlowsky were approved by the members in attendance.

B. Treasurer's Report

Chris Renschler presented the Treasurer's report.

As of the last GSG Business meeting (4/10/2014), this financial report was presented to the members. Since March 2013, the balance of $6,023.08 is up by $57.87, Membership dues are down (March 2013 was $120) and result in a loss of $141.10. No IAG dues were paid since 2012/13 ($786.39) and

added some uncertainty regarding the following budget. Awards costs are at $1,500 and are unchanged. Additional 2014 award plaques costs resulted in a oss of $60.00. The Mel Marcus investment earnings are up $160.90. Sponsorships/ads (T&F/W&S) are up by $40.00. The AAG 2013 reception was great, but added a loss of $1,350.00. Thanks to the 2012 Chair Robert Pavlowsky, Missouri State University, the latter costs were taken care of resulting in an extraordinary sponsorship contribution of $1,350.00.

Since the cost for the AAG 2014 reception of $1,000 was not yet accounted for, the attending members decided spontaneously to look for other options. **A unanimous donor provided one of his shoes and after passing it around more than $500 were collected while the business meeting continued! Thanks to all of you!**

Special Note from the Chair: Graciously our chair - Melinda Daniels - quietly never asked to get the remaining $500 reimbursed. Melinda, special thanks for the donation and hosting a great reception that followed the Business Meeting in the hallways.

As you know Sponsors/Donations to the GSG are welcome and will be announced at the meetings and posted in Geomorphorum!

C. Web Editor Report

Mike Urban continued to be leading the GSG Internet presence. No further report other than regular updates was presented. The attendees thanked Mike for his continued efforts updating the online information and for hosting the pages for free on his server. Thank you Mike!

IV. Old Business

A. Physical Geography Reception Update

There was no reception this year, but as mentioned earlier, there are plans for a Physical Geography Symposium next year and there would be also a reception

B. IAG Dues

The IAG dues have not been paid for the past and this year due to a lack of communication between the US geomorphology organizations. While the AGU is not paying , the AAG and GSA geomorphologist are under the gun to share the annual burden of a 1,000 Euro national membership fee. There was also a change at the IAG treasurer and no response. This is a lingering issue and the incoming chair and Carol Harden will work on a solution for the future.

C. Student Awards Issues

Open student award schedule this year, posters potentially next year.

V. New Business

A. Old “Gilbert Plaque

What to do with "old" Gilbert Plaques--Hang at AAG DC? Outgoing treasurer will hold on to the old plaque and will discuss with the AAG leadership in the near future.

B. Other New Business

There was no other new business.

VI. Announcements

A. Conferences

The upcoming Binghamton Geomorphology meetings were announced (see details in this newsletter).

B. Journals

Dick Marston reported the latest news about the Journal Geomorphology. Mark Fonstadt reported on the review process and invited for submission to the Annals of the AAG. Carol Harden also invited to contribute to Physical Geography.

C. Other

Note by the Editor: There were also others that invited for publication with other journals, but I did not take notes and/or do not remember all the details. Please come to our annual business meeting or read more about the journals and conferences in this and past issues of Geomorphorum that are posted on our webpage).

VII. Appointments

A. Awards Committee

Donald A Friend (outgoing Awards Committee Chair) nominated Tim Beach from the Department of Geography and the Environment, University of Texas. The members in attendance voted for Tim Beach joining the Awards committee. Thank you Tim!

B. Secretary-Treasurer

Melinda Daniels (outgoing chair) nominated Donald A. Friend for the position of Secretary-Treasurer. The members in attendance voted in favor and elected Donald A. Friend as the new secretary-treasurer elect. Congratulations Don!

VII. Awards Presentation

Don A Friend – the Chair of the Awards Committee – presented the 2013 GSG Awards.

The **Reds Wolman Student Research Awards** were awarded to:

Masters: Allison Tarbox.
(University of Alabama):
"Better Understanding Spatial Heterogeneity of Bedrock Channel Form in Mid-sized Rivers".

Ph.D.: Katherine B. Lininger.
(Colorado State University):
"Floodplain - Instream Wood Interactions in the Central Yukon River Basin".

The **Graduate Student Paper Awards** were given to:

Masters: Ryan Vaughn.
(University of Alabama):
"Hydro-Geomorphological Influences on Plant Patch Density and Distribution in Bedrock-Shoal Habitats of the Cahaba River, AL".

Ph.D.: Kory Konsoer.
(University of Illinois).
"Influence of Bedrock Control, Bank Materials, Riparian Vegetation, and Planform Geometry on the Morphodynamics of a Large Meandering River".

The **G.K. Gilbert Award for Excellence in Geomorphological Research**: was given to:

Stanley W. Trimble
for "Historical Agriculture and Soil Erosion in the Upper Mississippi Valley Hill Country," CRC Press. Citation by Andy Ward.

The **Melvin G. Marcus Distinguished Career Award** was awarded to:

Bruce Rhoads.
(University of Illinois at Urbana-Champaign).
Citation by Gary Parker.

Past Award Recipients are all listed on the Homepage of the Geomorphology Specialty Group of the Association of American Geographers at:
http://www.aag-gsg.org/awards.shtml

VIII. Adjournment

The meeting was adjourned at around 9 pm and everybody went outside for a reception in the hallways.

2014 AAG GSG CAREER AWARDS

2013 G.K. Gilbert Award for Excellence in Geomorphological Research

S t a n l e y W. T r I m b l e

for" Historical Agriculture and Soil Erosion in the Upper Mississippi Valley Hill Country," CRC Press. Citation by Andy Ward.

Nomination by Andy Ward

Stan is the recipient of the 2006 Melvin G. Marcus Distinguished Career Award. His work in Coon Creek has been described in the literature as classic by David Knighton, Bruce Rhoads and others. Stan has published widely including refereed articles in Science. However, due to a multitude of publication constraints, seminal refereed manuscripts often result in small incremental advances in knowledge. Rarely, do scientists invest in combining decades of work into a single publication. That Stan has done just that is indicative of the dedication and attention to detail and hard work, often in extreme condition, invested in his remarkable study.

The book contains more than 125 photographs and illustrations that document change since about 1880 and the scientific reasons for the change. Sequences of photographs, from almost identical locations, that show change over many decades are truly extraordinary and enlightening. Most readers will not be aware of the enormous investment of time associated with mapping land-use and stream geomorphology changes that span many decades and in some cases more than a century. Stan's work was initiated prior to the invention of laptop computers and the sophisticated land surveying equipment that are available today. In fact some of the work was done when the use of slide-rules was still ubiquitous!

The book includes a foreward by Andrew Goudie and accolades by Jared Diamond, Clauide Vita-Finzi, Peter Wilcock, and Robert Meade. For example, Richard Meade proof read the book and in a quote on the back cover stated "An epoch-defining work on the evolution of landscapes under the influences of changing agricultural practices and the episodic movement and storage of fluvial sediment."

Boardman (2014) in a review of this book states that "Towards the end of the book, two remarkable and related features emerge. Fortuitously, the 500-year rainfall event with up to 300mm in 24 hours hits the Coon Creek area in August 2007. There was remarkably little erosion on slopes with some damage to stream channels. For Trimble, this proved one of his main contentions that conservation tillage, widely applied in the study area, successfully prevents erosion. The evidence produced here is very convincing and is an important contribution to the literature." In a second review Mehan (2014) states "This is a book of solid science but also the best kind of environmental history describing the interaction of human beings with their landscapes."

In the final chapter of the book Stan presents eleven insightful conclusions. He states that Seemingly haphazard and random, there is actually a systematic time and space pattern to the profound physical changes shown in this book and to the resulting effects on human activity. And there are explanations for most of it." Arguably this might be the most important conclusion but there are others I would like to mention. Stan states that ".. well-designed governmental programs, along with an enlightened and informed populace, can help ameliorate environmental problems. While perhaps some mistakes were made, many of the programs were inspired." His final conclusion is "that significant landscape changes, even those that threaten life and property, may soon be forgotten unless well documented and made known." I think it is important to recognize, that the foundation for this remarkable body of work, and the many lessons learned, were in part due to the extensive and arduous work of many others long before Stan embarked on his own research of the Hill Country. Like most of us I lament the opportunities lost due to the short duration of most studies I and others are able or willing to conduct.

This gem of a book is a must read for everyone interested in the environment and how landscape changes due to agriculture influence stream geomorphology.

References:

Boardman John. 2014 Book Review: Historical Agriculture And Soil Erosion In The Upper Mississippi Valley Hill Country, Stanley W. Trimble. CRC Press, Taylor and Francis Group, Boca Raton, Florida, USA. 2013. ISBN 978-1-4665-5574-7 (hardback), 242 pp. Published online in Wiley Online Library (http://onlinelibrary.wiley.com/doi/10.1002/ldr.2277/references)

Mehan III G. Tracy. 2014. Force & Resistance. Ruin, Recovery in the Mississippi Watershed. In the Literature, The Environmental Forum Vol 31. No. 1, The Environmental Law Institute http://www.eli.org/

Acceptance by Stanley W. Trimble

(read by Donald A. Friend)

I am very grateful to the Geomorphology Specialty Group for this award. I thank the awards committee for its work and also those who wrote so eloquently on my behalf. I'm truly sorry that I can't be present to accept the award in person and visit with you.

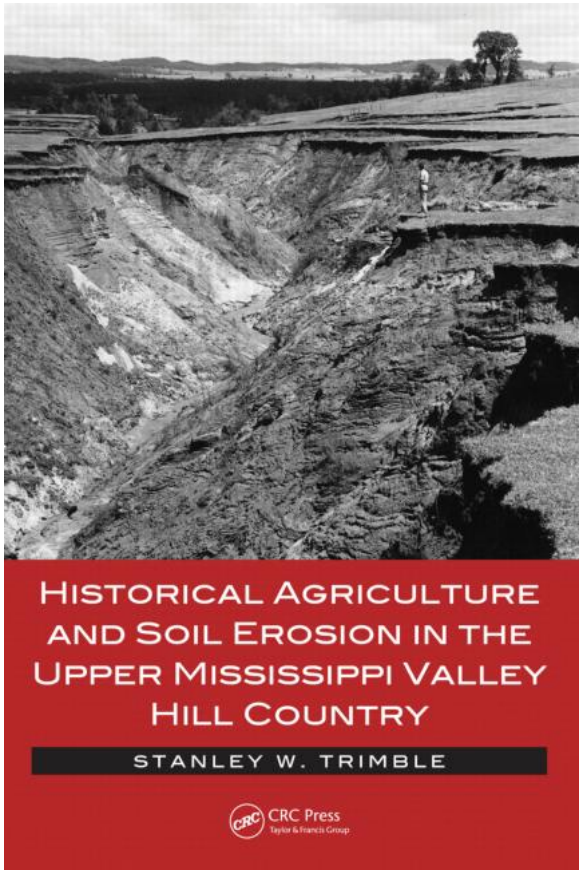
The book Historical Agriculture and Soil Erosion in the Upper Mississippi Valley Hill Country was a long time coming. It was conceived in 1978 when I was a visiting assistant professor at the University of Chicago. After I presented a colloquium there, Karl Butzer suggested that I do a monograph on the subject for the long-standing Department of Geography monograph series. I took this on as a serious endeavor but it just seemed that there was always more to be done before writing this book. However, I did write memos to myself through the years and had illustrations prepared as I conceived them. Finally, as I passed my 70th birthday and prepared to retire from UCLA, I knew that it was then or never. But amazingly, when finally I sat down to write, the book just flowed out in a continuous stream.

I feel so lucky to have had my career in hydrology and fluvial geomorphology, and I'm equally lucky to have done this as a geographer. As some of you might know, my PhD coursework was in historical settlement geography with a minor in demography and rural sociology. This gave me a background in human geography as it was practiced back then and gave me viewpoints which I might not have had otherwise. My somewhat eccentric road to becoming a geomorphologist does not bear telling here, but I am eternally grateful to the mostly now-deceased geography faculty at the University of Georgia who insisted that all graduate students take a diversity of courses, insuring that I had geomorphology along the way. And I am grateful to many others through the years, most of whom are mentioned in the book acknowledgements.

It is amazing to reflect on the progress of geomorphology over the past 46 years so please permit me to briefly do so. As graduate students, we often had discussions about what practical use that geography in general, and geomorphology in particular, might have. The rhetorical question we asked was "Does it bake bread." When I went on the job market in 1972, I heard stories of geomorphologists calling themselves engineers, hydrologists or geologists in order to get a job. Now, everyone in the realm of environmental studies knows what geomorphologists do and, indeed, we find trained geomorphologists taking important jobs in many different areas. In short, geomorphologists now get well-deserved recognition and respect and, to this end, the Geomorphology Specialty Group has played a key role. I am glad to have played a role in its formation.

Again, thank you one and all.

Stan Trimble,
Prospect TN



2014 Melvin G. Marcus
Distinguished Career Award

B r u c e R h o a d s
(University of Illinois – Urbana Champaign).

Nomination by Gary Parker

It is with great pleasure that I nominate Prof. Bruce L. Rhoads of the Department of Geography, University of Illinois Urbana-Champaign, for the Melvin G. Marcus Distinguished Career Award. …

Prof. Rhoads received his Ph.D. from the Department of Geography, Arizona State University, in 1986. Not long after that, he took a faculty position in the Department of Geography at the University of Illinois Urbana-Champaign. He has been head of that department since 2001. Prof. Rhoads has spent the 25 years since receiving his PhD specializing in river geomorphology. During this period, he has established himself as an exceptionally talented geomorphologist, indeed an international leader who more than fulfills the requirements of a prestigious award such as the Marcus Award. I justify this statement below.

As you know as well as I do, Prof. Rhoads is the leading geographer working on the topic of river meandering. 15 papers published or in press since 1991 document his extraordinary accomplishments in this field. These accomplishments include a) pioneering research on how flow variability affects the morphology and migration of meandering rivers, b) field studies of the flow and coherent turbulent structures in meandering rivers, and their relation to bank and bed configuration, c) modeling of flow in meandering rivers with high-resolution turbulence models, and d) the integration of field geomorphology with numerical models of meander migration.

Prof. Rhoads has recently added one more outstanding achievement to this list. He has been observing the Wabash River here in Illinois for many years. Recently he was able to fully document and characterize a meander cutoff as it happened. Not only did he and his team characterize the processes associated with this cutoff, but they also documented a huge pulse of sand that was delivered to the Ohio River as a result. This research, which was published in online in Nature Geoscience last month, encapsulates the imagination, originality, timeliness and downright doggedness of Prof. Rhoads in pursuing the topic of meandering over more than 20 years.

Prof. Rhoads also happens to be the leading geographer in another important area of river geomorphology, i.e. river confluences. 15 papers since 1987 document his groundbreaking contributions to this field. In this work, he has brought together field-based research, laboratory experiments and numerical modeling using up to and including Large Eddy Simulation to characterize flow in and morphology of confluences. The research has elucidated the effect of hydrological interactions between confluent tributaries, large-scale fluid motion (particularly helical cells), and fluid turbulence in shaping patterns of bed morphology, sediment transport and bed-material characteristics at stream confluences. It has provided crucial insight into the role of confluences in the broader context river systems. Prof Rhoads is presently extending the scope of his research in this area from relatively small streams to much larger rivers, so exploring the effect of scaling.

Prof. Rhoads is also a leader in the study of human impacts on rivers. His repertoire of research in this area includes a) a study of the effectiveness of bendway weirs in providing bank protection, b) a science-based alternative to the Rosgen method of stream classification for river restoration, and c) a broad-based analysis of the geomorphic, ecological and social aspects of the effects of straightening and dredging on small streams that have been greatly modified to allow for drainage from agricultural fields. I wish to highlight here, however, an example of a stream naturalization project that was implemented in the North Branch of the Chicago River near Chicago, Illinois. Prof. Rhoads not only studied the scientific aspects of renaturalization of this stream, but was also responsible for major aspects of the design and implementation itself. The level of detail of his involvement included the specific placement of boulders as part of pool-riffle sequences to improve habitat. This work can be considered the case example of how a geographer can bring basic research to bear in solving specific, applied problems of social import.

Prof. Rhoads has achieved his goals in part by reaching out to, and teaming with, specialists in other fields, such as the sedimentologist Jim Best, the civil engineer Marcelo Garcia, the ecologist Ed Herricks, the fluid mechanician Alexander Sukholodov and the Large Eddy Simulation specialist George Constantinescu. Not only has this broadened and enriched his research repertoire, but it has reaped substantial recognition for him in fields such as civil engineering that are considered by some to be well outside geography.

Perhaps an anecdote will illustrate the depth and breadth of Prof. Rhoads' insight. A close colleague of mine who is the international leader in the mathematical theory of river meandering, Giovanni Seminara, complains from time to time that his rich but highly theoretical work on river meanders has gone unappreciated by other specialists. (I have suggested to Prof. Seminara that he make his results more accessible to the non-mathematician.) After reading one of Prof. Rhoads' review papers, Prof. Seminara commented to me that Prof. Rhoads, a geographer, had far better insight into the meaning of his work than most of the other theoreticians working on meandering.

Prof. Rhoads is also an outstanding teacher and mentor of young researchers. I have personally interacted with seven of his graduate students, and have come to appreciate his care and dedication to mentoring. Two outstanding examples of Ph.D. students of Prof. Rhoads who have gone on to productive careers as university professors are Melinda Daniels at Kansas State University (i.e. yourself!) and Inci Guneralp, who is now at Texas A&M University.

Prof. Rhoads is not only a stellar international leader among geographers in the field of geomorphology; he is the leader in the two areas of river meandering and river confluences. He richly deserves the Melvin G. Marcus Distinguished Career Award in Geomorphology.

Gary Parker

Acceptance by Bruce Rhoads

Receiving the Melvin Marcus Distinguished Career Award from the Geomorphology Specialty Group is a great honor – an honor that is humbling, but that also makes me acutely aware of how long I have been pursuing my career in geomorphology! I am especially honored by this award because Mel Marcus, a member of my PhD committee, was someone I greatly respected and admired. I remember fondly time spent with him in the field, such as the trip to Silverton, Colorado for his course on Snow and Ice, at get-togethers at his house for the physical geography caucus (informal brainstorming sessions involving grad students and faculty at ASU), and also at the occasional swim party in the Marcus pool.

I have many people to thank, but will try to keep it brief.

First, and foremost, I want to thank my parents. Both my mother and father are children of the Great Depression who never had the opportunity to go to college, but who recognized the value of learning. Both fully supported my early interest in science, even though it was something in which they had little or no formal background. My mother fed this interest through weekly visits to the local library. If I lived near her I have no doubt she would still be bringing me books to read. My father, who passed away a year and a half ago, fed my scientific interests through frequent visits to the planetarium and natural history museum at Franklin and Marshall College in Lancaster PA (along with buying me both a microscope and a telescope).

I am indebted to the faculty at Shippensburg University, especially Jack Benhart and William Shirk, who rescued me from my initial declared major of accounting and opened my eyes to the wonders of geography and earth science. Jack Wilson in the Chemistry Department at Shippensburg strongly urged me to go on to graduate school in geography after failing to convert me to a chemist.

I owe a special debt of gratitude to Duke Winters who during my Master's program at Michigan State University taught me the fine art of academic writing and who convinced me that I should pursue a PhD and a career in academia.

I have already mentioned Mel Marcus's influence at Arizona State University, where I did my PhD, but Will Graf, my advisor at ASU, has been, and continues to be, one of the most important influences on me as a scholar. Will exposed me to academic research of the highest caliber and also taught me important skills about how to thrive in the world of academia. To him I owe an enormous debt of gratitude.

I feel very fortunate to have landed at the University of Illinois directly out of graduate school. Being there has been incredibly rewarding. I have been surrounded by amazing colleagues not only in geography, but throughout the university. Within the department, Colin Thorn served as a mentor early in my career and remains a good friend. He taught me the value of pursuing interests in the complementary worlds of theory and data.

Ed Herricks in the Department of Civil and Environmental Engineering, helped hone my skills in field research, working with me on collaborative projects examining linkages between the geomorphology and ecology of human modified streams in the Midwest. He also connected me to the amazing resources of Illinois' top–rated civil and environmental engineering program.

In the mid-1990s, I got an email (then a new technology) from Alex Sukhodolov, at the time in Moldova, inquiring about my emerging work on stream confluences. I found funds for Alex to come to the US, thus beginning a collaboration that continues to this day. Alex is a kindred spirit in field experimentation - working with him is the closest I can come to working with a clone of myself.

Over the years, I have had the remarkable good fortune to see some amazingly talented scholars in river and watershed science join the faculty at Illinois and enhance the open, collaborative atmosphere of interdisciplinary river research there. Every day I am humbled by the talents and productivity of people like Gary Parker, my nominator for this award, Marcelo Garcia, Jim Best, Siva Sivapalan, Praveen Kumar, and Ximing Cai. To be nominated for this award by Gary is especially gratifying because he has always been one of my academic heroes. His contributions to our understanding of rivers are simply astounding.

Over the years I have been blessed with many talented graduate students, too many to mention individually here, who have taught me as much, if not more, as I have taught them. Without a doubt, working with such talented students has been the most rewarding part of my career. I am enormously proud of them all.

Finally, I would like to thank my family for their enduring love and support. My daughter Jamie is now married and my son Steven is away at college, but I am grateful for their patience and understanding over the years when dad was rushing out in the field to chase a flow event in the river or was distracted by geomorphic thoughts.

Last, but most important, none of what I have accomplished would have been possible without the sacrifices, encouragement, support, friendship, and love of my wife Kathy. Thank you, my love, for going on this journey of life with me.

Bruce Rhodes

OTHER PAST MEETING NEWS

45th Annual Binghamton Geomorphology Symposium (2014 BGS) on "Planetary Geomorphology."
By Devon Burr

September 12-14, 2014
Department of Earth & Planetary Sciences
University of Tennessee, Knoxville, TN

Organizers for the 2014 BGS are Devon Burr (dburr!@utk.edu) Alan Howard, and Doug Jerolmack.

Although no previous BGS has focused on planetary geomorphology, planetary topics have been included implicitly or explicitly in many previous symposia. At the 14th BGS held in 1983, one quarter of the 16 papers were on planetary topics, and numerous other symposia have addressed geomorphic subdisciplines that are highly relevant in planetary studies.

For example, all planetary bodies have relief and exert gravitational acceleration on their surface materials, so that understanding of mountains and hillslope processes (symposia in 1985, 1989, and 2001) provides an important basis in understanding surface processes throughout the Solar System.

Virtually all planetary bodies experience geophysical stress, so that tectonic geomorphology (the symposium in 1984) is likewise important of interpreting structures on extraterrestrial surfaces. Extraterrestrial landscapes are extremely arid and a surprisingly large number of them have atmospheres that act on surface sediments, so that aeolian and arid regions geomorphology (symposia in 1977 and 1986) is highly useful in planetary geomorphology. As a final example, liquid flow is evidence on both Mars and Titan, making terrestrial studies in fluvial and flood geomorphology (symposia in 1973, 1979, 1987, 2008) critical for understanding these bodies. And the relevance of numerous other past symposia to planetary studies could be offered, illustrating the strong dependence of planetary studies on terrestrial geomorphology.

This overlap of topics serves to illustrate the potential for symbiosis between terrestrial and planetary geomorphologists. The aim of the 2014 Binghamton Geomorphology Symposium was to bring together these two groups of earth scientists to learn from each other. Terrestrial geomorphologists saw new landscapes and learned new ideas from their planetary geomorphology siblings. Planetary geomorphologists gained practical, ground-truth input from their terrestrial counterparts.

BGS 2014 began on Friday, Sept, 12, with a one-day field trip of the local Appalachian Mountains led by Prof. Robert D. Hatcher, Jr. The field trip included stops to inspect and discuss river terraces, karst landforms, paleoseismic structures, and landslides, along with enjoying some beautiful views within the Great Smoky Mountains National Park (Figure below).

Figure: BGS 2014 field trip participants in discussion on a hillslope showing rainsplash microtopography and rill morphology

That evening, the symposium attendees were treated to a talk by Prof. Linda Kah, a Co-Investigator on the Mars Hand Lens Imager (MAHLI) instrument (Edgett et al., 2012) on the Mars Science Laboratory (MSL) (Grotzinger et al., 2012). Prof. Kah described some of the operations of the MSL and the geologic discoveries from that mission, such as the analysis of fluvially rounded conglomerates (Williams et al., 2013), along their implications for the past processes on Mars.

On Saturday and Sunday morning, September 13-14, oral presentations were given, interspersed with poster sessions. Although limiting oral presentations to invited presenters is unusual in the planetary field, the 2014 BGS followed this format as is traditional for the symposium, and the papers in this issue are cited below. Some of the invited speakers / authors dropped out due to planetary mission operations. In general, substitute speakers were found for the symposium, although due to the timing, substitute papers could not be procured for this special issue. Speakers included scientists from all stages in their careers, from well-established full professors to graduate students. The oral presentations were ordered so as to progress from the more common to the less common geomorphologic processes in the planetary realm. This order of progression was selected so as to discuss the foundational or basic processes and the landforms they create, which then condition the landscape for the less common processes.

The symposium began with two talks on impact crater morphology. Impact cratering is the single most common geologic process in the Solar System and conditions every planetary landscape, although subsequent processes may reduce or even (on Earth) eliminate that impact conditioning. In the first talk of the symposium, Prof. Nadine Barlow of Northern Arizona University provided a broad overview of impact crater morphologies on both silicate bodies in the inner Solar System and icy bodies in the outer Solar System (Barlow). She both laid the foundation for understanding basic impact crater morphologies, and for detecting unusual forms, including forms influenced by heterogeneous subsurface structure, degradational processes, and climate change. Ms. Samantha Peel of the University of Tennessee Knoxville then gave a presentation on impact craters with central pits (Peel and Fassett, 2013). This unusual morphology is found on both silicate bodies (primarily on Mars, as well as a few identifications on the Moon and Mercury) and on icy bodies, where they are more prevalent. This distribution of central pit craters in the Solar System suggests that volatiles are involved in their formation, but the formation mechanism(s) remain controversial (see, e.g., the introduction of Alzate and Barlow, 2011).

Tectonics is virtually as common as impact craters: tectonic landforms have been observed on all solid-surface bodies visited by spacecraft. Thus, the second pair of talks addressed tectonics. Dr. Amanda Nahm provided a talk on tectonics throughout the Solar System. The talk gave an overview of the range of deformation in both types of materials and of how that deformation provides clues about subsurface structure. Observations of similar tectonic structures on both rocky and icy bodies suggest that these structures may be interpreted similarly. Thus, topographic analyses of faults on both silicate and icy bodies alike can be used to derive information on elastic lithosphere thicknesses and tectonic displacements. A case study of such a tectonic analysis was given in the next talk by Ms. Chloe Beddingfield. This talk presented an analysis of the tectonic structures associated with deformed regions (“coronae”) on Miranda, the innermost regular satellite of Uranus. This analysis indicated that the normal faults surrounding the coronae were listric, enabling derivation of heat flux and thermal gradient at the time of formation (Beddingfield et al., 2015).

The next topic was volcanism. Dr. Laszlo Kestay of the U.S. Geological Survey Astrogeology team in Flagstaff, AZ, spoke about an unusual landform, the basaltic ring structures reported uniquely in the Channeled Scabland of western Washington state (Keszthelyi and Jaeger). This landform is found in voluminous lava flows that have been scoured by catastrophic floods. The investigations into ring structures both provided new scientific data about this enigmatic morphology and suggested a multi-stage formation mechanism, including phreatovolcanism, lava flow inflation, intrusion of molten material into tensile cracks, and subsequent erosion by the flood water. This study illustrated how analogical reasoning between terrestrial and extraterrestrial landforms can provide new insights, even when the analogy is not validated (Keszthelyi and Jaeger). The second talk on volcanism was presented by Prof. Christopher Hamilton of the University of Arizona Department of Planetary Sciences. This talk provided a detailed investigation of regionally extensive lava flows in the Cerberus plains region of Mars. Mapping of these flows, which originated from volcanotectonic fissures, showed them to have inundated an older valley system and debouched onto the northern plains geologic region (Hamilton, 2013).

Aeolian geomorphology within a planetary context was described and explained by Prof. Ryan Ewing of Texas A&M University. This talk reviewed the use of aeolian bedform patterns to reconstruct environmental conditions on different worlds, contextualizing these different patterns within a systems approach to aeolian dune field pattern formation. The study demonstrated that multi-spatial analysis of bedform patterns maximizes environmental reconstructions, although limitations exist at the various response time-scales for the differently sized bedforms (Ewing et al. 2015 ref when available).

The next topic was fluvial geomorphology. Dr. Ross Irwin of the Smithsonian Institution presented research on a fossil delta in the Eberswalde Crater on Mars. In this work, morphological features were used to constrain dominant discharge, runoff production and longevity of deposition. Three scenarios were evaluated for the water source, with the most likely source inferred to be intermittent runoff from rain or seasonal snow melt, with depositional times scales of 104 – 106 years (Irwin et al.). The research presented in next talk by Dr. Yo Matsubara, also of the Smithsonian Institution, was prompted by the observation of seemingly meandering fluvial deposits on Mars (Burr et al., 2009). The talk described the investigations and findings into the Quinn River on Earth that meanders with limited vegetation. For this desert analog site, the cohesion necessary for meandering was inferred to result from deposition of silt/clay potentially enhanced by flocculation due to salts. A field investigation in Alaska indicated that, for that site, the permafrost was not an influence on bank strength (Matsubara et al. 2015 ref when available). The third talk on fluvial geomorphology was presented by Dr. Alexandra Lefort, formerly of the University of Tennessee Knoxville, who described investigations into reversed channel slopes, i.e., longitudinal river profiles that now slope downwards in the opposite direction from their original slope. The inference from this morphologic and modeling investigation is that slope reversal most likely resulted from tectonic deformation by erosion of highlands material (Lefort et al. 2015 ref when available).

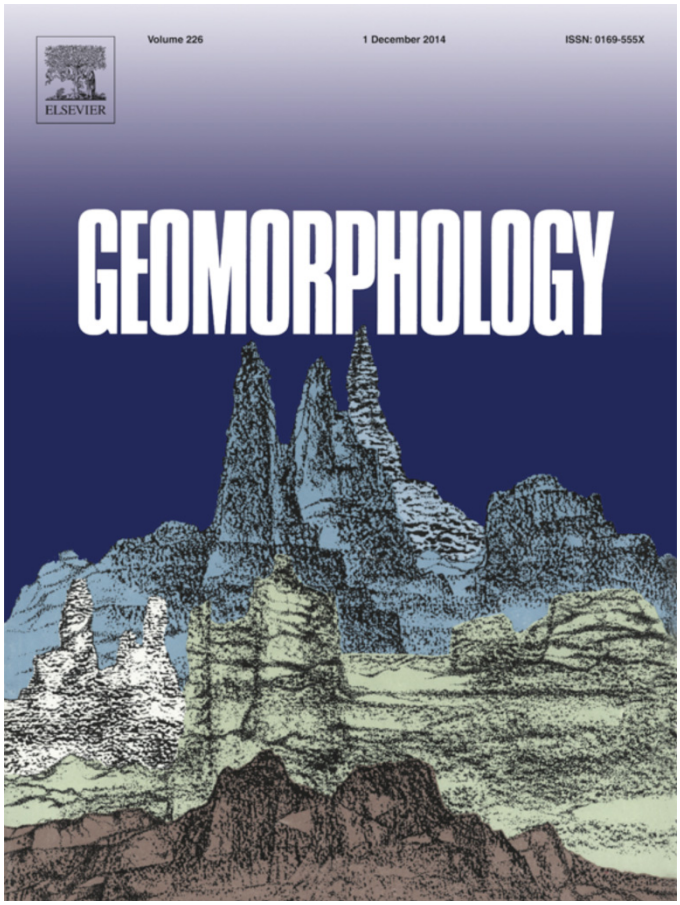
That evening, after the banquet, the attendees were treated to a talk by Prof. Victor Baker from the University of Arizona on Planetary Geomorphology: Some Historical/Analytical Perspectives (Baker). In this talk, Prof. Baker discussed reasoning processes in planetary geomorphology, the importance of using multiple working hypotheses to arrive at accurate results, and the necessity of scientific openness to 'brute facts,' even if they point to an answer that is different than the prevailing paradigm. Examples were presented within their historical context to illustrate the pitfalls of different types of reasoning and to enable the audience to avoid such pitfalls (Baker).

On Sunday morning, talks began with icy topics. Dr. Joe Levy of the University of Texas proposed a hydrological continuum linking water sources in cold desert to flow response and morphologic results (Levy). Comparison of three sets of landforms in the McMurdo Dry Valleys of Antarctica to similar landforms on Mars led to a framework for linking diagnostic landforms to the hydrological processes in permafrost environments (Levy). The following talk by Dr. Isaac Smith of the Southwest Research Institute presented findings regarding the south polar layered deposits on Mars (Smith et al.). The south polar troughs are erosional cyclic steps, with some post-trough accumulation on the trough low side. Subsurface stratigraphy indicates such accumulation occurred relatively recently. Observations and timing of trough clouds point to seasonal processes during retreat of the layered deposits for this accumulation (Smith et al.).

The next two talks centered on Titan, the largest satellite of Saturn. Titan presents Earth-like landscapes, but at ten times the Earth's distance from the Sun, those landscapes are formed in very un-Earth-like materials. At a temperature of 94K, the flowing liquid on the surface is nitrogen and hydrocarbons and the crust is water ice. Prof. Alex Hayes of Cornell University presented a comparison between hydrocarbon lakes on Titan and lakes on Earth. This talk was followed by a presentation by Prof. Catherine Neish on landscape modeling. The talk focused specifically on modeling of Titan's land surface to assess whether the sparse impact crater population on Titan (Neish and Lorenz, 2012) could be explained by fluvial degradation. Preliminary results support this possibility.

The concluding talk, by Dr. Ross Beyer of NASA Ames Research Center and the SETI Institute, provided information on planetary datasets (Beyer 2015 when available). Following lunch, Dr. Beyer provided a tutorial on acquisition and analysis of planetary datasets. Because of the small number of attendees, Dr. Beyer was able to tailor his tutorial to individual needs and attendees were able to ask specific questions relevant to their own work.

Throughout both days of the symposium, poster viewing opportunities occurred. Chloe Beddingfield presented a comparison of laboratory measurements and fault dips in cryogenic ice, with implications for fault geometries on icy bodies. James Biemiller gave a poster on the imbricated boulders in Athabasca Valles, Mars, and posed the question as to whether they were quarried by floods of water or floods of lava. For his poster, Richard Cartwright showed analyses of the ephemeral rivers in the Namib Desert as potential analogs for fluvial features on Titan. Ashley Dameron presented analyses of slopes on double ridges on Europa as a test of proposed models of formation.



On his poster, Keenan Golder showed his mapping of flood channels and flood lavas in the Cerberus region of Mars. Robert Jacobsen presented investigations into the form-discharge relationships for meandering rivers and constraints on their applicability to Mars. Genevieve Kidman gave evidence for large scale tectonic processes on the Tharsis rise, Mars. On their poster, Edwin Kite and colleagues reported their work on how the scale of river deposits changes with elevation in the Aeolis Dorsa region of Mars. Emily Nield showed her investigations into the effect of particle spin on the trajectory of saltating grains. And Katherine Shover presented evidence for an ancient ocean on Mars, using the morphology and spatial distribution of deep-water terrestrial analogs.

Concluding Remarks on BGS 2014

The 43rd annual Binghamton Geomorphology Symposium, held at the University of Tennessee in Knoxville, focused on the theme of Planetary Geomorphology, and this special issue presents a collection of papers presented at this symposium. This symposium was the first in the 45-year-history of the BGS specific to planetary geomorphology. As such, it represented a fundamental expansion of topic for the BGS and offered an unprecedented opportunity for its Steering Committee and habitual attendees alike to learn about cutting-edge geomorphology, both in terms of landscapes and techniques. At the same time, the symposium included a field trip and talks on all the traditional subdisciplines of geomorphology. Thus, the symposium brought together the best of the old and the new in geomorphology, and pointed the way to future discoveries on Earth and elsewhere.

For more information about the 2014 BGS go to the http://web.eps.utk.edu/symposium/index.php

The BGS 2014 on Planetary Geomorphology will be published as Special Issue of the Journal Geomorphology.

AHEAD: THE 2015 AAG IN CHICAGO, IL – APRIL 21-25 2015

Call for 2015 AAG Student Award Competitions

- Graduate Student Paper Awards
- Reds Wolman Graduate Student Research Awards

Information about the student awards, past awardees and on the requirements are at http://www.aag-gsg.org/awards.shtml

Call for Graduate Student Paper Awards

The GSG Awards Committee invites graduate students presenting in any GSG-sponsored session at the Annual Meeting of the Association of American Geographers to participate in the specialty group's Student Paper Award competition. Graduate students from all branches of geomorphology are encouraged to submit an application for consideration. Separate awards of $250 can be given for Masters and Ph.D. students.

To be eligible for the award, students must be members of the AAG and the Geomorphology Specialty Group and registered to give a first-authored presentation in a GSG-sponsored session. The subject matter may deal with any aspect of geomorphology. Papers are evaluated on the research contribution to the field of geomorphology and on the effectiveness of the presentation. Competitors will be acknowledged at the GSG business meeting, and award winners will be announced after the annual meeting and publicized in the AAG Newsletter.

Your application package must include:

- a cover letter indicating your graduate degree status, and the date, time, session number, session chair contact information, and location of your presentation
- one copy of the 250 word abstract submitted to the AAG

To be considered for the 2015 award, the Awards Committee must receive these materials and any supporting documentation **by March 1, 2015.**

Call for Reds Wolman Graduate Student Research Awards

Each year the GSG awards two graduate student research grants to help cover the costs of data acquisition, fieldwork, and laboratory analysis required to complete thesis or dissertation research. Awards are $400 for Masters level students and $600 for Doctoral students. Eligible students must be members of the AAG and the GSG.

Your application package must include:

- a research proposal (approx. 5 pages), and
- two short letters of recommendation.

To be considered for the 2015 award, the Awards Committee must receive these materials and any supporting documentation **by March 1, 2015.**

Please submit materials electronically to the Awards Committee Chair Inci Güneralp (iguneralp@geos.tamu.edu)

Call for

2015 GSG Career Awards Nominations

Nominations for the

Grove Carl Gilbert Award for Excellence in Geomorphological Research

and the

Melvin G. Marcus Distinguished Career Award

are **due by February 15, 2015**

Please submit materials electronically to the Awards Committee Chair Inci Güneralp (iguneralp@geos.tamu.edu)

Information about the career awards, past awardees and on the requirements are at http://www.aag-gsg.org/awards.shtml

GSG Business Meeting and Co-Sponsored Physical Geography Symposium

The **preliminary time for the GSG Business Meeting** is most likely after the regular sessions are finished on **THURSDAY, 04/23/2015**.

The GSG is also co-sponsoring **a newly created Physical Geography Symposium** that will be held for the first time at the 2015 AAG Annual Meeting in Chicago. The symposium has multiple goals including to increase the interaction among physical geographers and to experiment with alternative formats (e.g., themed oral sessions and large poster sessions) for physical geography sessions at future AAG annual meetings. The Symposium is entitled 'Physical Geography Symposium: Environmental Reconstruction -- A Nexus of Biogeography, Climatology and Geomorphology'.

==========

2015 AAG Physical Geography Symposium – A Special Invitation
by Julie Winkler

Numerous AAG members have raised concerns about the impact of the small attendance at many of the annual meeting paper sessions and the increasing popularity of other professional meetings, particularly the AGU meeting, on the "health" of physical geography in the AAG.

The situation in the UK, where human geographers attend the RGS-IBG annual meeting and physical geographers the EGU meeting, is a sobering reminder that the AAG must pay attention to the needs of physical geographers. At last year's "Conversation on the Future of Physical Geography" session in Tampa, attendees argued for experimenting with an AGU-like meeting structure with a limited number of themed oral sessions and larger poster sessions. They felt that such a structure could lead to larger attendance at oral and poster presentations and hence greater popularity of the AAG annual meeting. They further argued that the AAG annual meeting needs to also be attractive to physical scientists from outside of geography, not just to geographers.

You can find a summary of the discussion at http://news.aag.org/2014/06/future-of-physical-geography/

The **Physical Geography Symposium at the 2015 AAG in Chicago (THURSDAY 04/23/2015)** is an initial attempt to experiment with an AGU-like structure. Admittedly, this first offering is rather "heavy-handed", as the organizers (Carol Harden, Dick Marston and myself) identified the theme and selected the speakers (including some speakers external to the AAG) for the oral presentations, compared to the open call (and subsequent review) for sessions that the AGU uses. But we wanted to be in a position to interact very closely with the AAG central office to make this happen and to work through kinks, along with continually assessing the impact of these AGU-like sessions on the AAG annual meeting as a whole and on specialty group activities.

We are planning **a second "Conversation on the Future of Physical Geography" session for Chicago**, most likely on **FRIDAY 04/24/2015 right after the Physical Geography Symposium**, although we don't have a specific time yet from the AAG central office. At that session, attendees will have an opportunity to provide their feedback on the symposium, particularly whether they feel if this type of structure warrants further experimentation, and, if so, how should the symposium be opened up so that there is a process for selecting themes for oral sessions, and so on.

We would very much appreciate all your help and involvement in the Physical Geography Symposium. Anything that you can do to advertise the symposium to the members of your specialty group and to encourage them to participate would be extremely appreciated.

Also, please keep us informed of any ramifications (positive or negative) of the symposium on the annual meeting activities of the Geomorphology Specialty Group. Share with us your reactions and those of the members of your specialty group to the symposium itself and more generally on this concept of offering some "AGU-like" sessions at the AAG annual meeting.

Julie Winkler

==========

Most likely on **FRIDAY 04/24/2015** - **right after the Physical Geography Symposium and the "Conversation on the Future of Physical Geography** it will be the time for the

Sponsored by Taylor-Francis/ Routledge

2015 Distinguished Lecture on Geomorphology and Society

From Landscape Evolution to Human Evolution: Using Cosmogenic Nuclides to Reconstruct 5 Million Years of Change

Presented by
Prof. Dr. Darryl E. Granger, Department of Earth, Atmospheric, and Planetary Sciences, Purdue University, West Lafayette, Indiana

Over the past 25 years cosmogenic nuclides have revolutionized geomorphology. The buildup of cosmogenic nuclides at the ground surface provides a way to date landforms and measure erosion rates over millennial timescales. Over longer timescales, the radioactive decay of cosmogenic 26Al and 10Be in quartz offers a means for dating buried sediment and determining its paleo-erosion rates over the past ~5 million years, a critical time in human evolution, archaeology, and global climate change. Because cosmogenic nuclides can be measured in quartz, a common mineral, the burial dating method in particular opens up large parts of the world that have not previously been datable.

Burial dating has until recently been largely restricted to deeply buried cave sediment, limiting its applicability. However, recent advances in dating methods and instrumentation are completely changing this requirement, allowing samples to be dated from shallower depth and with much greater precision. Dr. Granger will present an overview of these advances, including isochron burial dating and its application to a variety of problems in archaeology, paleoanthropology, and landscape evolution.

Other GSG Sponsored and Co-Sponsored Sessions at the AAG

There will be again at least a total of **25 Geomorphology sponsored and co-sponsored sessions.**

GSG sponsored sessions (co-sponsors are indicated in sequence; the times are not set yet, but will be announced soon by the AAG):

22884. Fluvial Geomorphology 1: Forms and Processes - Paper - Geomorphology Specialty Group, Water Resources Specialty Group

21083. Fluvial Geomorphology 2 - Meandering Rivers - Paper - Geomorphology Specialty Group

21729. Fluvial Geomorphology 3: Spatial Heterogeneity in Rivers - Focus on Lithology and Channel Morphology - Paper - Geomorphology Specialty Group, Water Resources Specialty Group

22178. Fluvial Geomorphology 4: Spatial Heterogeneity in Rivers - Focus on Hydrology and Watershed Processes - Paper - Geomorphology Specialty Group, Water Resources Specialty Group

22132. Past and Present Environmental Science of the Neotropics and Beyond - Panel - Geomorphology Specialty Group, Biogeography Specialty Group, Paleoenvironmental Change Specialty Group

21274. River Observations, Monitoring, and Management - Illustrated Paper (10 Participants) - Geomorphology Specialty Group, Water Resources Specialty Group

21146. Sustainable Transportation and Urban Growth: Challenges and Prospects for the 21st Century I - Paper
Geomorphology Specialty Group, Transportation Geography Specialty Group, Geographic Information Science and Systems Specialty Group

22114. The Taylor-Francis/Routledge Distinguished Lecture in Geomorphology "From Landscape Evolution to Human Evolution" presented by Darryl E. Granger Panel - Geomorphology Specialty Group, Landscape Specialty Group, Paleoenvironmental Change Specialty Group

21140. The View from the Anthropocene: Measuring the Historic Human Impact on the Environment and Landscape I - Paper - Geomorphology Specialty Group, Historical Geography Specialty Group, Landscape Specialty Group

21935. The View from the Anthropocene: Measuring the Historic Human Impact on the Environment and Landscape II - Paper - Geomorphology Specialty Group, Landscape Specialty Group, Historical Geography Specialty Group

The following are GSG co-sponsored sessions lead by the Water Resources Group:

22304. Human Impacts on Watershed Processes I - Paper - Water Resources Specialty Group, Geomorphology Specialty Group, Mountain Geography Specialty Group

22511. Human Impacts on Watershed Processes II - Paper - Water Resources Specialty Group, Geomorphology Specialty Group, Mountain Geography Specialty Group

21997. Hydrology, Biogeosciences and Management in Human-Impacted Watersheds - I - Paper - Water Resources Specialty Group, Geomorphology Specialty Group

22622. Hydrology, Biogeosciences and Management in Human-Impacted Watersheds - II - Paper - Water Resources Specialty Group, Geomorphology Specialty Group

22955. Hydrology, Biogeosciences and Management in Human-Impacted Watersheds - III - Paper - Water Resources Specialty Group, Geomorphology Specialty Group

21382. Sustainable Watershed Management: Issues in Hydrology, Water Quality, and Water Quantity - Paper - Water Resources Specialty Group, Geomorphology Specialty Group

22553. Sustainable Watershed Management: Issues in Hydrology, Wter Quality, and Water Quantity 2 - Paper - Water Resources Specialty Group, Geomorphology Specialty Group

22554. Title: Sustainable Watershed Management: Issues in Hydrology, Water Quality, and Water Quantity 3 - Paper - Water Resources Specialty Group, Geomorphology Specialty Group

22827. Sustainable Watershed Management: Issues in Hydrology, Water Quality, and Water Quantity 4 Paper (Not Scheduled) (5 Participants)
Specialty Groups: Water Resources Specialty Group, Geomorphology Specialty Group

The following are GSG co-sponsored sessions lead by the Paleoenvironmental Change Specialty Group:

21079. New Perspectives in Paleoenvironmental Change and Geoarchaeology I: The Mediterranean and Maya - Paper - Paleoenvironmental Change Specialty Group, Geomorphology Specialty Group

22149. New Perspectives in Paleoenvironmental Change and Geoarchaeology II: North America and the Caribbean - Paper - Paleoenvironmental Change Specialty Group, Geomorphology Specialty Group

22290. New Perspectives in Paleoenvironmental Change and Geoarchaeology III: Eastern North America - Paper - Paleoenvironmental Change Specialty Group, Geomorphology Specialty Group

22506. New Perspectives in Paleoenvironmental Change and Geoarchaeology IV: The Maya World - Paper - Paleoenvironmental Change Specialty Group, Geomorphology Specialty Group

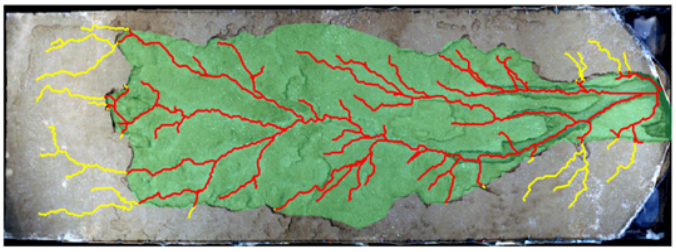
22824. New Perspectives in Paleoenvironmental Change and Geoarchaeology V: Anna Roosevelt and the American and African Tropics - Paper - Paleoenvironmental Change Specialty Group, Geomorphology Specialty Group

The other GSG co-sponsored sessions:

23084. Sustainable Transportation and Urban Growth: Challenges and Prospects for the 21st Century II - Paper - Transportation Geography Specialty Group, Urban Geography Specialty Group, Geomorphology Specialty Group

BINGHAMTON AND OTHER UPCOMING MEETINGS

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



46th Annual Binghamton Geomorphology Symposium (2015 BGS) on

Laboratory Experiments in Geomorphology
University at Buffalo, Buffalo, NY
September 18 to 20, 2015 (Friday through Sunday)

Deadline for poster abstracts: June 1, 2015
Publication of final papers in Geomorphology and Elsevier book: August, 2015

Conveners:
Sean J. Bennett, Department of Geography, University at Buffalo, seanb@buffalo.edu
Peter Ashmore, University of Western Ontario,
Cheryl McKenna Neuman, Trent University,

Purpose:
While the discipline of geomorphology historically has been dominated by field research, many scientists have employed experimental methods to address key aspects of Earth surface processes. Numerous transformative ideas and concepts have emerged from such experimental endeavors, and this methodology now plays a central role within geomorphic research. This symposium seeks to bring together leading experts and emerging scientists actively engaged in laboratory-based experimental research of geomorphic systems. Themes have been selected based on geomorphic phenomena, and contributors will be asked to highlight the unique capabilities of their facilities and equipment, to discuss how their experimental research has or will transform the discipline of geomorphology, and to critically assess broader, cross-cutting issues concerning laboratory-based experimentation of geomorphic systems.

Pre-meeting fieldtrip:
As the focus of the symposium is on laboratory-based experimental research, the pre-meeting fieldtrip will be comprised of a tour and hands-on demonstration of the experimental facilities at University at Buffalo. The university has three fully-functional and diverse laboratories to examine Earth surface processes, and these include several tilting recirculating flumes to examine open channel and overland flow, particle image velocimetry and photogrammetry systems, rainfall simulators, and a rotating room with a scaled-model of Lake Ontario.

Program:
1. Granular flows and hillslope processes, David J. Furbish, Vanderbilt University, Hillslope processes Gerard Govers, Katholieke Universiteit, Rill erosion; Richard M. Iverson, USGS Cascades Volcano Observatory, Debris flows
2. Fluvial processes, Maarten G. Kleinhans, Universiteit Utrecht; River and delta morphodynamics; Michael P. Lamb, California Institute of Technology; Steep river channels Chris Paola, University of Minnesota, Clastic depositional systems; Elowyn M. Yager, University of Idaho, Coarse sediment transport
3. Aeolian processes, Keld R. Rasmussen, University of Aarhus, Wind tunnel simulation of planetary surfaces
4. Coastal and marine processes, Heidi Nepf, Massachusetts Institute of Technology, Flow-sediment-vegetation interactions; Jeff Peakall, University of Leeds, Submarine channels
5. Glacial processes, Neal R. Iverson, Iowa State University, Laboratory experiments of glacial processes
6. Landscape and planetary processes
Lucy E. Clarke, University of Gloucestershire, Alluvial fans, Fabien Graveleau, Université des Sciences et Technologies de Lille (Lille-1)
7. Biophysical and ecogeomorphic processes
Anne F. Lightbody, University of New Hampshire, Biological boundary layers; Joanna C. Curran, Northwest Hydraulic Consultants, River restoration
8. Data management and facility development
Leslie Hsu, Lamont-Doherty Earth Observatory, Data sharing, Stuart J. McLelland, University of Hull, Total Environment Simulator, Peter A. Troch, University of Arizona, Landscape Evolution Observatory, Biosphere2

Further information, questions and comments contact seanb@buffalo.edu or see symposium website: https://www.ubevents.org/event/bgs46

47th Annual Binghamton Geomorphology Symposium (2016 BGS) on

Connectivity in Geomorphology
Fort Collins, CO
(September 17 to 19, 2016)

This symposium seeks to bring together leading experts and emerging scientists actively engaged in research related to geomorphic connectivity. Connectivity is an inherent property of all forms of Earth surface processes and landforms, and the geomorphic community is increasingly explicitly emphasizing connectivity as a conceptual framework to understand fluxes, transfers, and transient and long-term storage of material and energy within landscapes.

The symposium is organized around six major themes:
(1) sediment connectivity,
(2) hydrologic connectivity,
'(3) geochemical connectivity,
(4) riverine connectivity,
(5) landscape connectivity, and
(6) modeling connectivity.

We have already lined up the Keynote speakers and the speakers within all the themes (final list to be posted soon). Besides the set of oral presentations, there will also be a poster session.

More information will be provided later about abstract submission for the poster session. We also anticipate a pre-meeting field trip during Friday the 17th.

Symposium Organizers:

Ellen Wohl,
Frank Magilligan, and
Sara Rathburn.

If you are interested in organizing a
Binghamton Geomorphology Symposium

please contact:
Chair of the Steering Committee
Jonathan Phillips (jdp@uky.edu).

PUBLICATIONS

Geomorphology
By Dick Marston

2014 marked the 27th year that Elsevier has published the journal, Geomorphology. It is published 24 times per year, with a record 5750 pages having been published in 2014.

A Virtual Special Issue was published to celebrate the 25th anniversary of Geomorphology, available at
http://www.journals.elsevier.com/geomorphology/virtual-special-issues/virtual-special-issue-for-geomorphologys-25th-anniversary/

This Virtual Special Issue consists of a collection of highly downloaded and top-cited papers published in the journal, and our selection was refined using a keyword search to include as many papers as we can that truly reflect the full spectrum of the discipline, from fundamental theory and science to applied research of relevance to sustainable management of the environment. Our selection also showcases a few more recent papers that reflect our current understanding of the field too.

The three co-editors-in-chief remain Richard Marston (since 1999, located at Kansas State University), Takashi Oguchi (since 2003, located at the University of Tokyo), and Andy Plater (since 2005, located at the University of Liverpool). The senior editor for special issues in the Americas has been Jack Vitek and for the rest of the world is Adrian Harvey. Jack has just stepped down for health reasons, ending his long-standing service for the journal, including as editor from 1990-1999. The book review editor is Dave Butler.

The Editorial Board is comprised of 65 members from around the world. Vic Baker and Nel Caine have served on the Editorial Board since the beginning in 1987! David Alexander, Ellen Wohl, and Oliver Korup have each reviewed over 100 manuscripts since 2005! The editors GREATLY appreciate the reviews provided by members of our editorial board and by external reviewers. Over 65,000 pages have been published since the first issue in July 1987. 123 special issues have been published, including the seven below for 2014.

117. Discontinuities in Fluvial Systems (Guest Editors: Denise Burchsted, Ellen Wohl, Melinda Daniels)

118. Stream Catchment Dynamics (Guest Editors: Roey Egozi, Judith Lekach)

119. Morphological Characterization and Fluvial Processes of Large Rivers at Different Time Scales (Guest Editors: Helmet Habersack, Daniel Haspel, Bernhard Schober)

120. Sediment Flux and Sediment Budget Studies in Cold Environments: New Approaches and Techniques (Guest Editors: A.A. Beylich, I Gartner-Hoer, A. Decaulne, D. Morche)

121. Coral Reef Geomorphology (Guest Editors: Paul Kench, Hiroya Yamano, Christopher Perry, Scott Smithers)

122. Permafrost and Periglacial Research in Antarctica: New Resulrs and Perspectives (Guest Editors: Mauro Guglielmin, Goncalo Vieira and Adrian Harvey)

123. Tropical Rivers of South and South-east Asia: Landscape Evolution, Morphodynamics and Hazards (Guest Editors: Rajiv Sinha, Vishwas S. Kale and Tapan Chakraborty)

The 2-year Impact Factor is 2.577, an all-time high for the journal. Using the Impact Factor, Thompson Reuters reports that Geomorphology is ranked 18th out of 46 physical geography journals, and 41st out of 173 multidisciplinary geosciences journals. The number of manuscripts being submitted to the journal continues to grow and will exceed 700 for 2014. Over 900,000 full-text articles were downloaded from the journal worldwide in 2014 via Elsevier's Science Direct website, a number that is expected to reach 1,000,000 in 2015. The rejection rate for manuscripts has been 44-45% over the past three years. The journal website has linked to guidelines for authors, and guidelines for reviewers.

It is now possible to publish Open Access articles in Geomorphology by selecting the sponsored article option after your acceptance. See http://www.journals.elsevier.com/geomorphology/how-to-publish-open-access/
.

"Article Usage Alerts" is a new free service offered by Geomorphology that enables authors to measure the impact of their article via its usage on ScienceDirect. At the journal website one can find a list of the "Most Downloaded Articles" and another list of the "Most Cited Articles." Members of the AAG Geomorphology Specialty Group occupy spots on both lists. The quality of reviews has never been better. In addition to regular articles, we are now encouraging submission of review articles, and some have already been published. Please contact one of the co-editors-in-chief if you are interested in submitting a review article on your favorite topic or if you are interested in organizing a special issue. Finally, please be willing to provide a service to the discipline by agreeing to review a manuscript when offered the opportunity. If you haven't been asked to review manuscripts, please alert the editors.

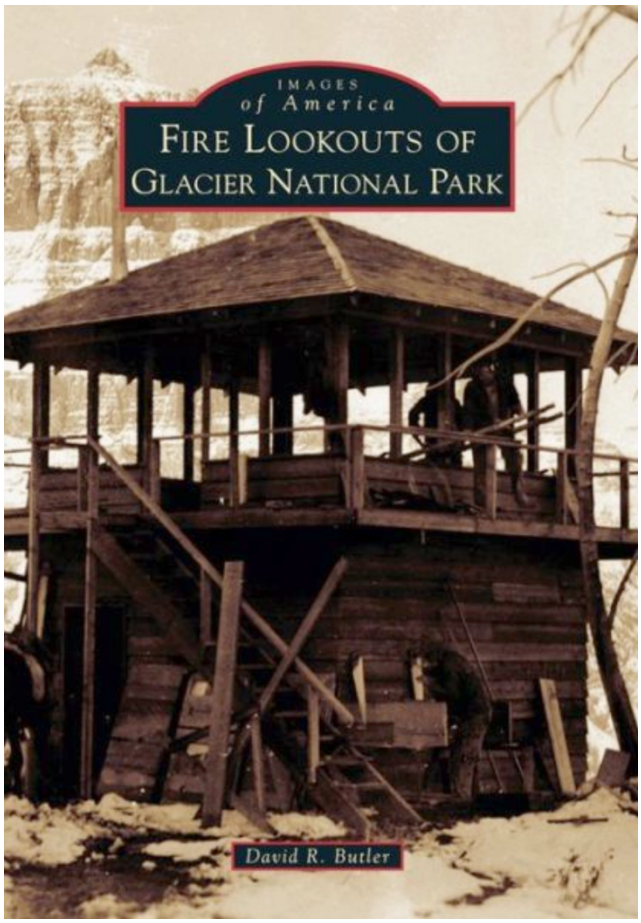
Other noteworthy new journal articles:

Sawyer, Carol F., David R. Butler, and Tela O'Rourke, 2014.
An historical look at the Binghamton Geomorphology Symposium.
Geomorphology 223, 1-9.
doi: 10.1016/j.geomorph.2014.06.022

BOOKS

Fire Lookouts of Glacier National Park
By David R. Butler
Arcadia Publishing, Charleston, SC, 128 pp.

Book Description:
The first fire lookouts in the Glacier National Park region were simply high points atop mountain peaks with unimpeded views of the surrounding terrain. Widespread fires in the 1910s and 1920s led to the construction of more permanent lookouts, first as wooden pole structures and subsequently as a variety of one- and two-story cabin designs. Cooperating lookouts in Glacier Park, the Flathead National Forest, and the Blackfeet Indian Reservation provided coverage of forests throughout Glacier National Park. Beginning in the 1950s, many of the lookouts were decommissioned and eventually destroyed. This volume tells the story of the rise and fall of the extensive fire lookout network that protected Glacier National Park during times of high fire danger, including lookouts still operating today.



SOFTWARE

GeoWEPP ArcGIS 10.2 – A Free Software for Soil Erosion Research and Teaching
By Chris Renschler

The Geospatial Interface to the Water Erosion Prediction Project GeoWEPP ArcGIS 10.2 has been released.

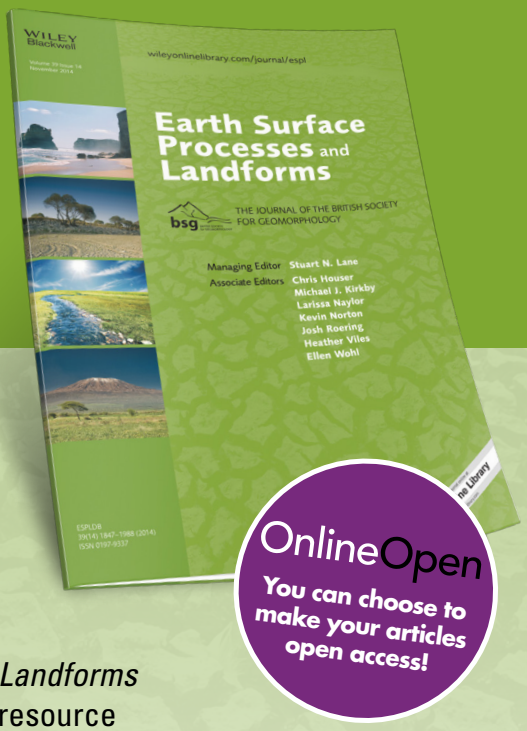
The Geo-spatial interface for WEPP (GeoWEPP) (Renschler, 2003) utilizes digital geo-referenced information such as digital elevation models (DEM) and topographical maps to derive and prepare valid model input parameters and defaults to start site-specific soil and water conservation planning for a small watershed with a single soil and land use for each sub-catchment.

The Water Erosion Prediction Project (WEPP) (Laflen et al., 1991; Flanagan and Nearing, 1995) model is a continuous simulation, process-based model that allows simulation of small watersheds and hillslope profiles within those watersheds for assessing various soil and water conservation management options for agricultural, rangeland, and forest sites. The integration of orthophotos, soil surveys, land use maps, climate data, and precision farming data as well as multiple soil and land use within each sub-catchment is currently under development.

The goal of the GeoWEPP project is to provide a series of interfaces for users with different levels of GIS knowledge that are capable to utilizing these different data sources in a standard format either provided by GIS users, by precision farmers with Global Positioning Systems (GPS) databases and/or through accessing commonly readily available U.S.-nationwide data sets that are free of charge. However, GeoWEPP has also been used by geomorphologists and practitioners around the world.

For more information and free downloads at:
http://geowepp.geog.buffalo.edu/

Earth Surface Processes and Landforms



RECENT VIRTUAL ISSUES

Collections of papers compiled into an online issue

Online Virtual Issues bring together collections of articles into one place.

- **Themed Topics** group together recent papers published in a number of different issues of *Earth Surface Processes and Landforms* into a single online resource. In doing so, we aim to create a resource that demonstrates new directions in a particular thematic area, by juxtaposing articles that might otherwise be read in isolation.
- **Special Issues** are collections of papers solicited and managed by Guest Editors of the journal, and published online only.

In order to keep informed of the latest information we suggest that you sign up for Wiley's Earth and Environmental email alerting services by visiting **wileyonlinelibrary.com/journal/espl** today.

● WORLD SOIL DAY

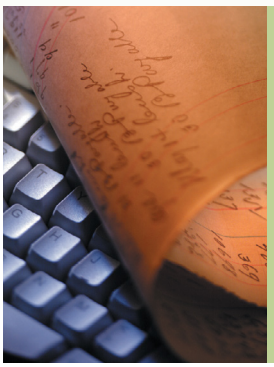
To celebrate World Soil Day 2014, this Virtual Special Issue draws together a number of the most significant contributions that have appeared in Earth Surface Processes and Landforms since 2010.

● ROCK SLOPE EROSION

Investigates rock slopes in a range of environments among the landscape elements most sensitive to climate change, the latter affecting rock mass properties, altering slope boundary conditions, and changing geosystem configurations.

● PLANETARY DUNE ANALOGUES

Dedicated to planetary dune analogues and the advances that have been made through the integration of remote sensing and terrestrial field data to better model and understand aeolian systems.



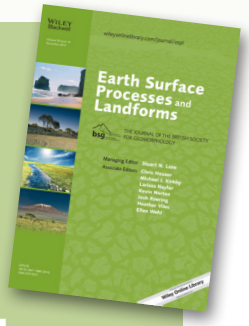
BACKFILES

In addition to the wealth of current content available, *Earth Surface Processes and Landforms* backfiles are available providing access to full web content from 1976-1995.

Why not recommend these to your librarian today?

Just click **"Recommend to Your Librarian"** on the journal homepage at:

http://wileyonlinelibrary.com/journal/espl



WILEY

66802

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

http://www.aag-gsg.org/geomorphorum.shtml