Notes from the Chair

Jake Bendix, BSG Chair, 2015–17

I will keep these notes brief – this is the time of year when I think most of us are more interested in heading out to the field, catching up on our writing, and otherwise engaging in summer activities than in reading lengthy musings in a newsletter. So here are just a few quick thoughts.

This past AAG was the second in three years in which I found myself in a session scheduled for the Saturday at the end of the meeting. Like others in similar circumstance, I did a certain amount of complaining about “being stuck” at the meeting so long (as though being stuck in San Francisco were a bad thing). That late session turned out to be a blessing, however. The session itself (one of several on Pyrogeography that Paul Laris and Megan Walsh organized) was a great one, in which I learned a lot from my fellow presenters. And the requirement that I stay until the end of the meeting meant that I attended a lot of other
good sessions as well. Biogeographers are doing good work, and lots of it (33 Biogeography sessions at the 2016 meeting). Many of the best papers I saw were presented by students, and by early-career faculty, so clearly the future for biogeographic research is bright.

About the only disappointment that I had during the meeting was that attendance for the Business Meeting was down, relative to the packed rooms that we used to have a few years ago. I do realize that there were a lot of other interesting things to do in in the evening in a fun city, and I also realize that the internet has provided a means for many of us to stay in communications semi-continuously, so that actually gathering in a room is less important than it once was. But that gathering is still worthwhile, partly so that we all participate in the group’s decision-making, and even more so that we all have a chance to meet and get to know each other, maintaining a community rather than simply a collection of individuals with overlapping interests. I note that this year the AAG started scheduling some specialty group business meetings at noon rather than in the evening, and am wondering whether we might achieve better turnout if we lobby for one of those time slots. I am inclined to try that, but please feel free to contact me (jbendix@syr.edu) with your views/preferences on this – or on anything else, for that matter.

Finally, I thank Carissa Brown, Joy Fritschle and Chris Kaase for their recently concluded service on the BSG Board of Directors. And I welcome Brenden McNeil, Maria Caffrey, and Thomas Patterson, who have begun their work as new Board members.

--Jake Bendix
Hello Biogeographers!

While it has been nearly two months since seeing you all at AAG, I feel like my work is still being fueled by inspiration from the meeting in San Francisco. The high quality research that is presented at AAG meetings, and in the Biogeography Specialty Group (BSG) sessions in particular, leaves me motivated and looking forward to contributing to the meeting in Boston in 2017. I hope this finds you all making the most of the summer break for work and adventures alike!

Each year, it is the BSG student representative’s responsibility to organize a panel session for the AAG meeting that focuses on student-specific interests. I chose to focus on professional development and invited a panel of early-career biogeographers to discuss their experiences during graduate school and strategies for success in finding jobs. I am very grateful to Arvind Bhuta (U.S. Forest Service), Aquila Flower (Western Washington University), and Kimberly Meitzen (Texas State University) for their participation as panelists. The session was scheduled late on Tuesday afternoon and despite a small group of undergraduate and graduate attendees, we had a very productive conversation that spanned topics such as mentoring, interdisciplinary work, the job market, and future directions for biogeography — all with an amazing view of the San Francisco Bay from our meeting room on the 25th floor of the Hotel Nikko! Thanks again to all who attended and please spread the word as to the value that such a candid forum can be to those who are navigating the challenges of graduate school and job searches.

Further and in hopes of encouraging increased participation from students, I would like to acknowledge how transformative my involvement in the BSG has been. During my graduate career, I have invested in regular participation at the annual meetings of several professional organizations. While presenting my research, learning from the work of others, and developing relationships with scholars from varied backgrounds always feels like important career development, nothing has seemed more personal than my experience with the BSG. The people that I have come to know and the support and interest that have been expressed for the work that I do have been encouraging to say the least. It feels lasting — like family! Therefore, I encourage you to increase your level of participation. Compete for a student presentation award or research grant, organize a session, and attend the business meeting. Get involved people!

I will conclude by congratulating Thomas (Tommy) Patterson on being elected your BSG student representative for the 2016-2017 term. Tommy is a Ph.D. candidate at the University of North Carolina at Greensboro. He specializes in tree-ring research and currently is examining how longleaf pine mast influences climate/growth relationships and its effect on disease ecology in the Southeast. Tommy and I met at the 2014 AAG in Tampa and have become friends who
look forward to catching up at AAG. You all should know that he is as crazy about riding bikes as he is about trees and biogeography. Tommy is excited to serve the BSG and welcomes any questions or thoughts that you all might have. Feel free to contact him at twpatter@uncg.edu and be sure to check out our facebook page — American Association of Geographers: Biogeography Specialty Group.

Sincerely,
Chris Kaase
Graduate Student Representative
kaase@email.sc.edu

BSG Board Elections

Joy Fritschle, BSG Board Member 2014–16 and Elections Organizer

Incoming Members:
- Student Representative, Thomas (Tommy) Patterson, University of North Carolina, Greensboro
- Board Member, Maria Caffrey, University of Colorado
- Board Member, Brenden McNeil, West Virginia University

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Awards and Competitions

James J. Parsons Award for
Distinguished Career in Biogeography
& Henry Cowles Award for Excellence
in Publication in Biogeography

Matt Bekker, BSG Board Member 2015–17 and Awards Organizer

On behalf of the BSG board, thanks to all who submitted nominations for the Cowles Award. We received excellent submissions and it was not easy for the board to make the final decision on a winner. We did not receive any submissions for the Parsons Award, so we encourage you to consider deserving colleagues for the 2017 competition.


Abstract: Little consensus surrounds the extent of Native American impacts upon tree species composition in Eastern North America, prior to European-American settlement (presettlement). Native American land-use practices (e.g., forest clearance and burning) likely altered forest composition, but the spatial extent of these alterations remains vaguely quantified. Previous research has attempted to quantify the spatial extent of clearance practices, but little research has addressed the more subtle alterations to tree species composition resulting from Native American land use. Research has also inadequately distinguished between environmental and anthropogenic controls upon tree species composition, leaving open the possibility that, instead of modifying forest composition, Native American societies instead settled where favored tree species were already present. This study employed species distribution models (SDMs) trained from tree species data within presettlement land survey records (PLSRs), in order to understand Native American impacts upon presettlement tree species composition in Chautauqua County, New York. Using historical and archaeological data, this study developed “Native American variables” (NAVs), which represented human accessibility to features of Iroquoian settlement. This study then modeled the distribution of tree species in relation to both environmental variables and NAVs. Notable results indicate that NAVs significantly improved the predictive performance of SDMs for mast-bearing taxa, such as oak (*Quercus* spp.), chestnut (*Castanea dentata* (Marsh.) Borkh.), and hickory (*Carya* spp.). Under a simulated absence of Iroquoian settlement, the amount of “suitable” area in Chautauqua County decreased by 2 to 23 percentage points for five mast-bearing taxa, depending upon species and modeling procedure. Results imply that Iroquoian alterations to tree species composition covered a larger spatial extent, in
comparison to previous estimates of the spatial extent of clearance practices in Iroquoian regions. Yet, the majority of forest compositional modifications occurred within 10 to 15 km of village sites. This study offers a novel methodology for quantifying Native American impacts upon past tree species composition, and suggests that Iroquoian land-use practices of the early Historic era shaped forest compositional patterns at local extents in one region of presettlement Eastern North America.

Matt Bekker (right) presenting Chris Larsen with the Henry Cowles Award for Excellence in Publication in Biogeography. Photo credit, Sally Horn

Chris, upon his return to New York, sharing the award with Stephen Tulowiecki.
Student Paper Awards

Carissa Brown, BSG Board Member 2014–16 and Student Paper Awards Coordinator

I am pleased to announce the winners of this year’s competition at the 2016 Annual Meeting in San Francisco. We had two excellent PhD student talks tie for first place. Please join me in congratulating Katherine Glover and Jeremy Johnson, Texas A&M University, UCLA on their achievements. Details of their talks follows:

Katherine Glover, April Chaney, and Glen MacDonald. A 90,000-year fire history from the San Bernardino Mountains, Southern California.

Evaluators noted that Katherine’s presentation was very impressive and tackled a huge amount of data, representing a great deal of work. Her research was very interesting and will make a unique and important contribution to the field.


Evaluators noted that Jeremy gave a clear and confident presentation based on significant research, which will make a major contribution to our understanding of treeline dynamics and response to climate change.

Because presentations and judging were ongoing at the time of this year’s BSG Business Meeting, these awards will be presented at the 2017 Annual Meeting in Boston.

Congratulations, Katherine and Jeremy!

The 2015 Student Paper Awards were presented during the 2016 BSG Business Meeting to Tera Del Priore (University of Colorado – Denver), M.Sc. category, for her presentation 4,000 Years of Environmental Change in Central Colorado: A Paleoecological Perspective, and to Lucas Harris (Pennsylvania State University), Ph.D. category, for his presentation Drivers of fire severity in an old-growth mixed-conifer forest, Yosemite National Park, California.

Congratulations, Tera and Lucas!

~Carissa Brown
Jake Bendix (left) presents the 2015 Student Paper Awards to our BSG stand-in model, Dave Porinchu. Dave was too overcome with emotion to speak on behalf of Tera and Lucas who were not in attendance. Photo credit, Sally Horn
**Student Research Grant Competition**

*Melanie Stine*, BSG Board Member 2015–17 and Student Research Grant Coordinator

There were a total of seven submissions for the student research award, two at the master’s level and five at the Ph.D. level. Every submission was of high quality and judges had a challenging time selecting only one submission for each category. We would like to thank all of the students and their advisors for their submissions. We would also like to thank the judges of the submissions for their time and useful suggestions and comments.

Recipient of the award at the Masters level was Hannah Durick from Texas A&M University, whose proposal was titled "Application of circuit theory to vegetation and terrain-based patterns of desert-elephant movements." Her advisors are Dr. David M. Cairns and Dr. Oliver W. Frauenfeld.

 Jake Bendix (right) presenting the “proxy” master’s student research award to David Cairns on behalf of Hannah Durick. Photo credit, Sally Horn
Recipient of the award at the Ph.D. level was Matthew Kerr from the University of Tennessee, whose proposal was titled "Using a New Proxy to Separate Drivers of Vegetation and Fire History in the Neotropics.” His advisor is Dr. Sally P. Horn.

Matt Kerr (left) accepting the Ph.D. student research award from Jake Bendix. Photo credit, Sally Horn

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News

2017 Annual Meeting of the AAG, Boston, Massachusetts

The Annual Meeting of the American Association of Geographers is one of the largest geographic conferences in the world. Our next meeting, 5–9 April 2017, will be held in Boston, Massachusetts, at the Hynes Convention Center, Marriott Copley Place, and the Sheraton Boston. Registration and abstract submission for the meeting are now open. The deadlines to submit abstracts for papers and posters are 27 October and 23 February, respectively. Please see the AAG Annual Meeting webpage for further information and updates (http://www.aag.org/cs/annualmeeting).

Biogeography Specialty Group Business Meeting Minutes, San Francisco, CA 31 March 2016

Minutes submitted by Matt Bekker, formalized by Taly Drezner

Executive Board Members Present:
Jake Bendix, Chair
Matt Bekker, Joy Fritschle (outgoing), Board Members
Chris Underwood, Newsletter Editor
Chris Kaase, Graduate Student Representative (outgoing)
(Absent: Carissa Brown (outgoing), Melanie Stine, Board Members; Treasurer Taly Drezner)

- Membership approximately 312

1. From SG chair’s meeting:
   - AAG will decrease dues for students, newest members, and lower-tier salary ranges for new faculty
   - Discussion regarding eliminating Annals topical divisions; editors will remain – let regional councilors know if you have input regarding this
   - Regional meetings will now include a top student paper competition that carries with it an award to support travel to the national meeting the next year
   - Will create an AAG fellows group
   - Note that George Malanson will receive lifetime achievement award at this meeting, and that Glen MacDonald will be president-elect of AAG
   - Some people are apparently not getting emails regarding BSG business. We need frequent communication.

2. Elections – Fritschle
   - Congratulations to our new board members:
     Brenden McNeil, WVU
     Maria Caffrey, Colorado
   - Congratulations to our new student representative, Thomas Patterson, UNC-Greensboro
   - Encouragement to run for positions in the future
3. Treasurer’s report – (Bendix for Drezner)
   - Last year, we awarded $1000 for the Ph.D. grant, $500 for the Masters grant, and $500 support to the student rep, and anticipate doing the same this year
   - We paid $24 for our website and contributed $400 to the physical geography symposium and reception. Our intake was $2079.50 from membership; thus, we spent $344 more than we took in last year, bringing down our reserves. We did receive a very generous donation from Scott Mensing (thank you Scott!) for $100 which helped defray some of these costs. Our surplus is difficult to measure as it fluctuates, but is currently hovering in the neighborhood of $800
   - If you are an award winner or need to be reimbursed, please contact Taly Drezner, Treasurer

4. Graduate Student Representative report – Kaase
   - Tuesday afternoon panel on professional development was successful; suggests these types of panels should continue in the future

5. Student Paper awards – (Bendix for Brown)
   - As usual, the competition is ongoing for this year, so no winner can be announced yet
   - Again, a call for more submissions
   - Winners from 2015:
     - M.S., Tera del Priore (U of Colorado Denver) – 4000 years of environmental change in central Colorado: a paleoecological perspective
     - Ph.D., Lukas Harris (Penn State U) – Drivers of fire severity in an old growth mixed conifer forest, Yosemite National Park, California
   - Board discussed consolidating M.S. and Ph.D. individual awards & creating one for which either M.S. or Ph.D. students can compete, but keeping a poster award or illustrated paper session for M.S. and undergraduates (i.e., one session for oral presentations and one session for posters).
   - After considerable discussion, motion approved to keep awards as-is, but students can now participate in any format: poster, oral, illustrated short paper, etc.

6. Research Grant Awards – (Bendix for Stine)
   - M.S., Hanna Durick - “Application of circuit theory to vegetation and terrain-based patterns of desert-elephant movements”
   - Ph.D., Matthew Kerr – “Using a new proxy to separate drivers of vegetation and fire history in the neotropics”

7. Henry Cowles Award for Excellence in Publication in Biogeography – Bekker

8. Meeting adjournment at 9:10pm.
Notes

Research:

Kim, Chang, and Chun Conduct Research on Database Spatial Autocorrelation

Daehyun Kim, PI, University of Kentucky, and co-PIs Heejun Chang, Portland State University, and Yongwan Chun, University of Texas at Dallas, were recently awarded a grant (BCS-1560907, $336,478) by the National Science Foundation Geography and Spatial Sciences Division for their research on analyzing the effects of spatial autocorrelation in geospatial databases. Congratulations Daehyun, Heejun, and Yongwan!

Recent Graduates

We would like to join David Butler of Texas State University in congratulating two of his recent advisees on their successful thesis defenses and subsequent graduation:

- Rachel M. Cavin. August 2015. Beaver Dam Dimensions and Distribution in Northeastern New Mexico
- Faisal Anzah. May 2016. Detecting the Shoreline Change of Qaruh Island, Kuwait, Using Remote Sensing and GIS

Curriculum:

New Curriculum Model for UW-Platteville Geography

In academia today, pedagogical methods abound and experts seemingly declare a new “best method” every few years. Such methods are often developed for the betterment of higher education and as a result of the ongoing effort to hone the delivery of knowledge. Some of these new approaches are effective and bring a renewed sense of excitement to the classroom; others are sometimes burdensome, seemingly ineffective, and eventually fall by the wayside. For better or worse, this is how we advance our craft. The Department of Geography at the University of Wisconsin-Platteville is rolling out a newly restructured curriculum that focuses on its greatest strength—experiential learning through undergraduate research.

In August 2015, the department embarked on a new physical geography curriculum for majors that is intensively focused on research and is strongly suited to the undergraduate research strengths and specialties of its faculty members. This immersive approach will expose students to traditional physical geography
concepts and knowledge through the lens of faculty-led research. Such a model is commonplace in undergraduate programs at small liberal arts colleges, but relatively rare at mid-sized public universities such as UW-Platteville.

Guided Research and Seminar courses compose the foundation of the new curriculum in which undergraduates engage with geography faculty in authentic, student-driven research projects. This approach will be augmented by traditional coursework and long-standing field-based courses, such as Biogeography, Field Geography of the Western United States, and the Ecology and Landforms Fieldtrip (a field course offered with biology faculty colleagues), to provide even more experiential learning opportunities to students. Students maintain a research portfolio throughout their educational experience, as faculty use these classes to guide student researchers through all stages of a project: development of hypotheses, research design, grant writing, field and laboratory work, analysis, presentation, and publication. This research-immersive approach has found success even in introductory coursework, as faculty-led research is now the focus of some general education physical geography laboratory exercises in biogeography, dendrochronology, paleoecology, and GIS.

This pedagogical model is built around the Department of Geography’s Tree-Ring, Earth, and Environmental Sciences (TREES) Laboratory, a Center of Excellence in Undergraduate Research at UW-Platteville. The TREES Lab is directed by Evan Larson, and also staffed by Lynnette Dornak, Chris Underwood, and Thomas Wilding—faculty with expertise in biogeography, dendrochronology, paleoecology, and GIS. The TREES Lab invites undergraduate students, as early as their second semester in college, to engage with geography faculty in authentic, student-driven, hands-on research experiences. The goal is to produce graduates who are highly competitive for graduate school and employment opportunities in biogeography, ecology, Earth and environmental science, and GIS.

**Miscellaneous:**

1. Back issues of *The Biogeographer* are posted on the BSG website ([www.biogeographer.org](http://www.biogeographer.org)).

2. Please consider adding the BSG domain to your favorite links and promote it on your homepage, Facebook, LinkedIn, etc. ([www.biogeographer.org](http://www.biogeographer.org)).

3. The BSG Facebook page is managed by Arvind Bhuta and is available here: [https://www.facebook.com/groups/141655989204924/](https://www.facebook.com/groups/141655989204924/)
4. John Kupfer is presently managing the BSG website (www.biogeographer.org). If you have links (or other materials), send up to 2–3 pages to John, including syllabi for biogeography courses. You can contact John at kupfer@mailbox.sc.edu

5. Communications among BSG members is usually by email through the AAG’s discussion forum. For instructions to access and post messages on the BSG forum, login to the AAG website (www.aag.org), then:

   Select “Memberships”
   Select “Specialty Groups”
   Scroll down to Biogeography and select “learn more”

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Submission Guidelines

Chris Underwood, Editor, The Biogeographer

Submissions to The Biogeographer should be sent directly to the editor (underwoodc@uwplatt.edu) as email attachments in Word format. Please spell-check and proofread your submissions carefully. Submissions should be concise and written in a style consistent with the rest of the newsletter.

Notes and News Items

Notes are intended to convey topical information of interest to the BSG community. Notes topics may include: (1) Research Notes – new projects and progress reports or general research-related ideas and issues; (2) Field Notes – recent field work or field trips or retellings of classic tales from the field; (3) Curriculum Notes – news, announcements, or articles related to teaching biogeography or pedagogical issues affecting the discipline; (4) Book Notes – book reviews or announcements; and/or (5) Miscellaneous Notes – anything that doesn't fit in any of the other categories.

News items can be personal, departmental, institutional, or any other biogeography-related happenings that have occurred since the last edition of The Biogeographer. These can be self-authored items or press releases.

Recent Publications

Only publications that have actually appeared in print or online will be listed; please do not submit in-press items until you have page numbers or a permanent URL.

Kind regards,

Chris