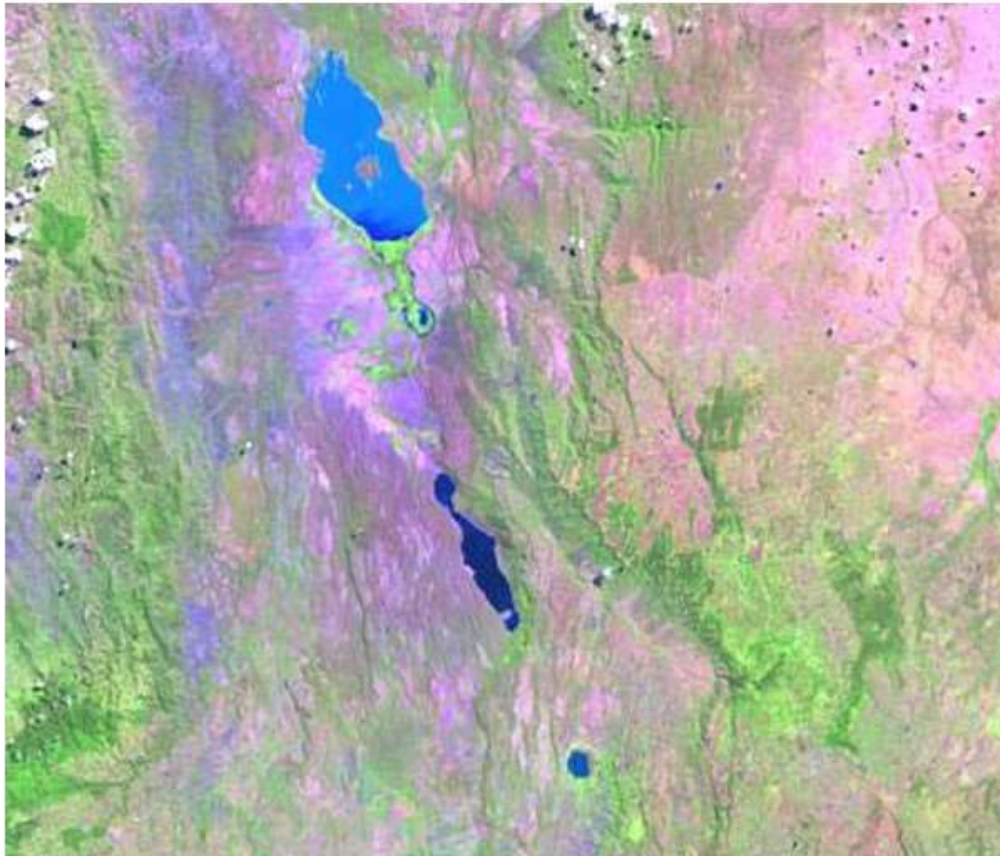


Geological Society of America
Limnogeology Division Newsletter

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From north to south: Lake Baringo, Lake Bogoria and Lake Solai (Kenya)

(Photo credit: NASA)





Limnogeology Division Newsletter

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From the Editor

Michelle Goman

Rohnert Park, CA

Welcome to the Spring 2015 edition of the Limnogeology Newsletter!

This edition of the Newsletter begins with a message from our new division chair, Joop Varekamp. It contains a list of sessions sponsored by Limnogeology for the upcoming 127th Annual GSA Meeting in Baltimore, and other informational items including:

- The I.C. Russell Award Citation and Response
- The Kerry Kelts Award Winners and Submission Information
- A list of upcoming limnogeology-related meetings

Don't forget to send me your news items!

Michelle (goman@sonoma.edu)

Message from the Chair

Joop Varekamp
Wesleyan University

The semester has ended, commencement ceremonies are done, and the time of the year that we love most – go into the field and study lakes - has arrived. First there is the ILIC6 meeting at Reno Tahoe, co-sponsored by the Division, where we hope to see many of you. After the summer the annual GSA meeting in Baltimore is awaiting, with the abstract deadline at August 11, 2015. Please submit abstracts to the sessions sponsored by our Division (see listing in this Newsletter). The June GSAToday issue has the announcement of the Kelts award for student research in Limnogeology, which is also listed in this Newsletter. Please encourage your students to submit proposals to cover expenses for field or lab work on lake related topics.



Changing of the guard: Joop Varekamp (incoming Chair) and Amy Myrbo (outgoing Chair) at Vancouver GSA meeting.

Our main effort this year will be to upgrade the Limnogeology website and transfer it to the *Connected Communities* site of GSA, which means we will have access to a bulletin board/discussion area. Our webmaster David Warburton will work closely with the IT staff at GSA headquarters to make this happen. I would like to see a “Gallery of Lakes”, so please send your photographs of the most beautiful, interesting, or bizarre lake, lacustrine sediment sequence, or lake beast/plant, with a short description of the image, and who you are and what you do.

We plan to have embedded or linked Youtube videos of lake topics on the site, and a rotating interview/video of an ongoing lake expedition somewhere in the world. We also would like to add to our links page sites of more regional and local lake science associations worldwide. We can only do this when you as our membership contribute material to this effort, and please let us know what you have and what you would like to see on the site.

Regarding publication of your results, which foremost you should put into GSA journals, the journal *Paleoceanography* (AGU/Wiley) has shifted its content focus slightly, and will also accept papers from lake studies that deal with paleoclimate records and land-sea connections and correlations.

I am coming back with the proposal of a LAKES issue of *ELEMENTS* magazine, and Antje Schwalb has shown interest in taking this project on with me. I will be bothering many of you for contributions in the near future.

I leave you with two images of the mysterious Keli Mutu lakes in Flores, Indonesia, with one lake changing color from blue green to red with the seasons. The middle lake has a floating sulphur skin and a pH <1. Greg Pasternack, now professor at UC-Davis, worked

with me on these lakes in the early 1990s for his senior thesis at Wesleyan. He may be a record holder in having three papers published from his undergraduate thesis work that are even now still among his most cited papers.

So to all undergraduate lake scientists → go for it!



<https://vacationspotindonesia.wordpress.com/2014/07/06/kelimutu-national-park/>

Best wishes, Joop Varekamp

E&ES, Wesleyan University

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2014 Israel C. Russell Award

Citation by Gail M. Ashley:

I am honored to present to the Division Dr. Robin W. Renaut for the Israel C. Russell Award for excellence in limnogeology through research, teaching, and service. Robin has been at the University of Saskatchewan (in Saskatoon) since receiving his PhD at the University of London. His PhD research in the Lake Bogoria region of East Africa was under the supervision of the illustrious W.W. (Bill) Bishop. At that time, Bishop had number of doctoral students to whom he gave free rein (i.e. let loose) on the Plio-Pleistocene in Africa. Robin thrived in this land of scientific freedom and opportunity. The East African Rift Valley was full of lakes about which very little was known. Robin and colleagues put an end to that. Using field based studies, he has made major contributions to the understanding of sedimentation, tectonics and hydrochemistry of lakes and springs in the Kenyan Rift deposits of the Turkana, Baringo-Bogoria and Magadi-Natron basins. With colleagues, he determined the role of groundwater in lake chemistry and resolved the mystery of why the East African lakes range from highly alkaline (i.e., soda lakes) to fresh. During his career he has published nearly 90 papers in refereed journals and another 40 as chapters in edited volumes. He is one of the scientific field team for the Lake Magadi Basin drilling area for the HSPDP (Hominin Sites and Paleolakes Drilling Project), in this international effort to obtain long-term records near hominin sites. Drilling of Lake Magadi occurred just this summer.

He is a collaborator extraordinaire, being both stimulating and easy to work with. He has had a longstanding collaboration with Brian Jones (University of Alberta) and they have

published over 40 papers on springs (both hot and cool) and composed of both silica- and carbonate-rich sediment. These papers starting in 1994 (20 years ago) are the gold standard for sedimentary geochemistry and high-resolution SEM imagery.

Robin has had a long collaboration with R. Bernhart Owen (Bernie); they served as each other's field assistants during their doctoral research and worked together since. They are often referred to as the Terrible Two by colleagues working with them. They have been friends and colleagues for over 30 years and have published sixteen papers together, so far.

Robin is an outstanding and dedicated teacher, as well, and has supervised a total of 22 BS, MS and PhD students. He is a man who sees through the confusing natural world of sedimentary geochemistry and depositional environments, and provides clarity of thought in his presentations. The excellent teaching ability carries over to his research. Robin's papers are always clearly written, full of details and have well-conceived illustrations that tie things together. He is also an artist. His chapter on "Lakes" that he co-authored with Elizabeth Gierlowski Kordesch in *Facies Models* (4th edition) is a "must have" for limnogeologists for both teaching and research.

Robin has also been very generous with his time for the profession. He has served as Associate Editor of a number of international journals, faithfully served on grant selection committees and as grant director for Research Council of Canada (NSERC). He was one of the founding fathers of IAL (International Association Limnogeology) and currently on the Board of Directors.

In summary, this nomination recognizes the major contributions in research, teaching and service that Robin W. Renaut has made to the relatively new, but rapidly growing discipline of limnogeology. He was one of the first researchers to approach the study of rift lakes holistically from the large-scale perspective of rift tectonics down to the microbes responsible for hot spring deposits. He has set a very high standard of accomplishment and is most deserving of the Israel C. Russell award. I am honored to be able to give Robin recognition for his achievements.



Robin Renaut, Gail Ashley and Amy Myrbo

Response by Robin Renaut:

Thank you Gail for those kind words. I am honoured to have received this award from the GSA Limnogeology Division. It is very nice to receive recognition from your peers for doing what you enjoy.

My interest in lakes began very early. I grew up in London near some ponds, where as a child I spent a lot of time throwing stale bread to ducks. My interest in the East African rift lakes began when I was an undergraduate student at the University of London, where I took a course on Cenozoic geology by the late Bill Bishop, who gave me the opportunity to do a PhD in Kenya. Bill was a sedimentologist and stratigrapher who specialised in providing the geological context for hominin sites in East Africa. During my first field season in 1976 I visited Lake Bogoria and its hot springs, and immediately fell in love with the place. There began my interest in saline lakes, geothermal sediments, and continental rift sedimentology.

For me, one of the main attractions of lakes is that they can be studied almost holistically. We can trace sediments from source to sink, and follow the chemical evolution and behaviour of waters from the most dilute to the most saline brine. The scale of modern lakes provides an opportunity to try to tackle the whole depositional system rather than just one small part. One day you can be studying gravel beaches, another day microbial carbonates, and another day turbidites. These depositional systems have huge diversity and are never boring.

Thirty years ago the limnogeological community was very small and seems to have grown almost exponentially since then. We can all thank Kerry Kelts and Beth Gierlowski-Kordesch for bringing together scattered groups of researchers and graduate students from around the world. Their initial efforts provided the roots for what we have today – both the Limnogeology Division of GSA and the International Association of Limnogeologists. Our informal conferences back then were small (perhaps only 30 to 40 people), great fun, and often field-based in remote locations. From them evolved the International Limnogeological Congresses, with hundreds of participants – Michael Rosen is organising the sixth one in Reno next June. They are always great events.

I have been very fortunate to work with many talented lake geology researchers who have taught me so much and frequently corrected some of my wilder ideas. Among them are Jean-Jacques Tiercelin, Beth Gierlowski-Kordesch, Gail Ashley, Tim Lowenstein, Jenni Scott, Andy Cohen, Dan Deocampo, Michael Rosen, and Michael Stamatakis. In particular, I must thank my close friend and colleague, Bernie Owen. Bernie and I met as grad students in 1975 and have worked on modern and ancient lake sediments in many countries. We have just finished a field season drilling the floor of Lake Magadi, and are now planning a new project, making almost 40 years of collaboration and research. I consider part of this award to be shared with Bernie.

Our discipline is in a healthy state. The paleoclimate records preserved in lake sediments are unparalleled, and the future of limnogeology looks very bright.

To conclude, I am very grateful for this award and sincerely thank the Limnogeology Division, and many friends, colleagues and graduate students who enjoy working on lakes. I especially thank my wife, Lin, for her continuing support and for always accepting my absences to do fieldwork, often for extended periods. Thank you all.

2014 Kerry Kelts Award Winners



Jordon Bright (Department of Geosciences, University of Arizona). His proposal is entitled “Looking for the ocean in a desert: Ostracode faunal and stable isotope investigation into an estuarine interpretation for the southern Bouse Formation, Blythe Basin, Az-Ca.”



Cindy Frickle (Department of Earth Sciences, University of Minnesota). Her project is entitled “Lipid-based immuno-magnetic capture and isolation of environmental microorganisms”.

2015 Kerry Kelts Submission Information

Applications are invited for the Kerry Kelts Research Awards. This year, one award of \$1,000 for undergraduate or graduate student research related to limnogeology, limnology, or paleolimnology is available. Deadline; July 31st 2015, 12 a.m. EST.

Prepare your application as a PDF (or PDFs) with your last name in all file names. The application files should contain a research summary and a short CV (two pages max.). The research summary must include a description of the proposed research its limnogeological significance, why the award funds are needed for the project, and a brief description of the student's other funding sources. Be sure to include a title. The maximum length for the summary is five pages, including figures and captions; the list of references cited is not included in this limit. Send your application to Division Chair Joop Varekamp, jvarekamp@wesleyan.edu. Please include "Kelts Award application" in the subject line.

Donate to the Kerry Kelts Award

GSA and the limnogeology Division hope to increase the number of Kelts awards, named for the visionary limnogeologist and inspiring teacher Kerry Kelts, in the future. If you can help support this award, please send your donation, labeled "Kerry Kelts Research Awards of the Limnogeology Division," to GSA at P.O. Box 9140, Boulder, CO 80301-9140, USA.

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Sessions Sponsored by Limnogeology Division at the 127th GSA at Baltimore

Abstracts deadline: **11 August 2015**

<http://community.geosociety.org/gsa2015/home>

T35. Honoring the Diverse Career of Dr. W. Berry Lyons: Geochemistry from Polar Deserts to Tropical Watersheds

Sarah K. Fortner, Carolyn B. Dowling, Karen Johannesson, Klaus Neumann, Carmen A. Nezat

GSA Mineralogy, Geochemistry, Petrology, and Volcanology Division; GSA Hydrogeology

Division; GSA Limnogeology Division; International Association of GeoChemistry; Geochemical Society

This session honors W. Berry Lyons and his many contributions to geochemistry. Dr. Lyons has investigated polar to tropical settings. His research, collaborative abilities, and leadership inspire many and have built new directions in geochemistry.

T123. Carbon Cycling in Lakes

Johan C. Varekamp, Amy Myrbo

GSA Limnogeology Division; GSA Quaternary Geology and Geomorphology Division; Geochemical Society

Lakes cycle carbon through photosynthesis or as depocenters for terrestrial particulate carbon. We seek abstracts that deal with carbon inputs, outputs, or cycling processes in lakes. We have a special interest in lakes with a volcanic or geothermal carbon input.

T124. Hot or Cold, Wet or Dry: The Diachroneity of Late Pleistocene and Holocene Lacustrine Climate Events

Scott W. Starratt, Michelle F. Goman

GSA Limnogeology Division; GSA Quaternary Geology and Geomorphology Division

Climate events (e.g., The YD and MCA) are identified at numerous sites across North America, but their timing varies with local conditions. Using a range of lacustrine proxies, this session focuses on the reasons for this variability.

T125. Lakes of the World

Scott W. Starratt, Johan C. Varekamp

GSA Limnogeology Division; GSA Quaternary Geology and Geomorphology Division

"Lakes of the world," celebrates lake science for and from a worldwide audience. Lakes are important fresh water reservoirs and their sediments contain records of global change, pollution, and ecological successions.

T192. Lawrence A. Hardie Commemorative Session

Tim K. Lowenstein, Robert V. Demicco, Linda Hinnov

GSA Mineralogy, Geochemistry, Petrology, and Volcanology Division

Research arising from the scientific contributions of Lawrence Hardie (1933-2013) is celebrated with talks in the fields of carbonate and evaporite sedimentology and geochemistry, secular variations in seawater chemistry, and cyclic deposition of carbonates.

T195. Paleoenvironmental Reconstruction of Hominin Sites: New Methods, New Data, and New Insights

Cynthia M. Liutkus-Pierce, Gail M. Ashley, Andrew S. Cohen
SEPM (Society for Sedimentary Geology); GSA Limnogeology Division; GSA Sedimentary Geology Division; GSA Quaternary Geology and Geomorphology Division; GSA Archaeological Geology Division

This session will showcase current research on paleoenvironmental reconstruction of hominin sites and will highlight innovative techniques, the latest data, and new insights.

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Upcoming Meetings

Geological Society of America (GSA) Annual Convention

2015 Baltimore, Maryland: 1–4 November
2016 Denver, Colorado, 25–28 September

2016 GSA Section Meetings

Cordilleran Section
Ontario, California
4–6 April 2016

North-Central Section
Champaign, Illinois
18–19 April 2016

Northeastern Section
Albany, New York
21–23 March 2016

Rocky Mountain Section
Moscow, Idaho
18–20 May 2016

South-Central Section
Baton Rouge, Louisiana
21–22 March 2016

Southeastern Section
Columbia, South Carolina
31 March–1 April 2016

Association of American Geographers (AAG) Annual Meeting

March 29th-April 2nd San Francisco, California

<http://www.aag.org/cs/annualmeeting>

Numerous sessions organized by the Paleoenvironmental Change Specialty Group.
Limnogeologists encouraged to participate! For more information please contact
Limnogeology division secretary Michelle Goman.

World Lakes Conference (WLC16)

The **16th World Lakes Conference (WLC16)** The Sixteenth World Lake Conference (WLC16)
November 7-11th 2016 in Bali, Indonesia.

<http://www.ilec.or.jp/en/wlc/new/?p=2864>

International Paleolimnology Association (IPA)

Mid-August 2015

The **13th International Paleolimnology Symposium** of the International Paleolimnology Association
will take place in **Lanzhou, China August 4-7th, 2015**.

Abstract deadline: June 30th 2015

The IPA Symposium website is: <http://ips2015.cn/dct/page/1>

American Society of Limnology and Oceanography (ASLO)

Santa Fe, New Mexico for the 2016 Summer Meeting, to be held 5-10 June 2016

Call for session proposals

<http://aslo.org/meetings/sessions/index.php>

Go to the Limnogeology Division website at:

<http://rock.geosociety.org/limno/index.html>

To get the latest information on other Limnogeology meetings and workshops...

David Warburton, Webmaster

**If you have any news, photos, articles, upcoming conferences and recent publications,
you would like to share with the division, please submit it to Michelle Goman at
goman@sonoma.edu**



A. Lake Baringo with balsa wood boat in foreground (Photo credit: Michelle Goman); B. Lake Bogoria with flamingo nests in foreground (Photo credit: Michelle Goman); C. Lake Solai (Photo credit: Gail Ashley).