



October, 2010

Volume 36

Number 3

THE PRESIDENT'S MESSAGE

We had a great turnout for a fun trip in the Lubec and Cutler area last month! Joe Kelley led most of stops, with Bob Johnston and Doug Reusch contributing to the bedrock stops. Joe shared the results of some past research at the reversing falls in Pembroke and recent work on salt marsh pools in Lubec, as well as upcoming work on coastal bogs in West Quoddy Head. He planned a trip that offered plenty of opportunities for walking and really spending time at a site, which is one of my favorite things about GSM trips. Sunday's walk on the Bold Coast trail out to the spectacular cliffs was a treat, and I hope to have a chance to walk the whole trail loop in the future. I put together a trip summary with some pictures, please have a look in this newsletter or check online. It was a pleasure to camp in beautiful Cobscook Bay State Park, and Bob Johnston put on a delicious cookout with help from his family. Thanks to all who attended, and hoping that those who couldn't will be able to join us next summer.

Both the fall GSM meeting and NEIGC are coming up soon! Mark your calendars now for the fall meeting, hosted by USM on the Portland campus on October 15. Irwin Novak has spearheaded the effort to bring Paul Marinos, this year's Jahns Lecturer, as the keynote speaker.

This fall meeting we will hold elections for GSM officers. Rob Peale is stepping down after serving more than ably as treasurer for over five years. Many thanks to him for his time; he has certainly helped with much more than managing GSM's finances. If you are interested in becoming more involved with the leadership of GSM, please consider serving as an officer. Nominate yourself before we nominate you!

This will be my final President's letter for GSM, a position I've enjoyed over the past two years. I owe many thanks to the other officers and board members for their help and advice during my tenure. I look forward to continuing to work with the organization and to spending more time with the Education Committee in the next several years as we move

forward with plans to expand the organization's outreach. I look forward to seeing you at NEIGC and the fall meeting in Portland!

Julia Daly, President (2008-2010)
dalyj@maine.edu



GSM Fall Meeting

Friday, October 15, 2010

University of Southern Maine

Portland Campus - Luther Bonney Hall

- 12:00 - 1:00 Executive Board Meeting – Room 403
- 1:00 – 3:00 GSM Minisymposium – Room 241
- 1:00 - *The AQUA Index: Risk and Assessment of Land Use on High Yield Sand and Gravel Aquifers in Maine*: Mark Holden, CG, Environmental Geology Unit, Division of Environmental Assessment, Bureau of Land and Water Quality, Maine Department of Environmental Protection
- 1:20 - *Regulation of Large Groundwater Withdrawals: Setting and Enforcing Standards for Resource Protection*: John T. Hopeck, Ph.D., Bureau of Land and Water Quality, Maine Department of Environmental Protection
- 1:40 - *Ground Source Heating and Cooling – an Overview of New England Applications*: Cliff Lippitt, CG, S.W. Cole Engineers.
- 2:00 - *Concentration Trends and Water-Level Fluctuations at Petroleum UST Sites*: Alan Kehew, Western Michigan University, Kalamazoo, MI, and American Hydrogeology Corporation, Portage, MI, co-author Patrick M. Lynch, American Hydrogeology Corporation, Portage, MI
- 2:20 – Groundwater Contamination from Nuclear Power Plant Operations: Matt Darois, Environmental Scientist, Radiation Safety and Control Services, Inc., Stratham, NH
- 3:00 - 3:30 Break

3:30 – 5:00 Keynote Speaker: Paul Marinos^{*1}. Talbot Auditorium, Luther Bonney Hall.
The Geology of Athens, Greece

5:00 – 5:30 Business Meeting

5:30 – 6:30 Social hour

6:30 – Dinner

Free Parking: Park in the parking garage on Bedford St. (Building 37 on the campus map). Push the button and take a ticket as you enter the garage. Bring the ticket with you to get it validated for free parking. When you return to your car after the meeting you will be required to show the ticket to the attendant on the parking office on the ground floor of the garage.

http://www.farmington.edu/downloads/campus_map.pdf

^{*1} **Paul Marinos, Ph.D.**, Professor of Engineering Geology at the National Technical University of Athens, Greece, will give the keynote lecture on October 15. He will discuss “The Geology of Athens, Greece.” Unlike most capital cities, Athens does not have a history of continuous expansion. It is one characterized by the glory of the golden age of the 5th century BC, followed by decline and near annihilation, and then resurgence in the 19th century when it became the capital of independent Greece. In addition to modern geologic considerations, Prof. Marinos also will review the way that the ancient Athenians practiced geology in founding their city, including the quarrying of marbles for ancient monuments such as those on the Acropolis (the Parthenon); and how water shortages due to climatic and hydro-geologic conditions forced Solon to impose, as early as the 6th century BC, rules for ground-water management.

Dr. Marinos is the Richard H. Jahns Distinguished Lecturer for 2010, sponsored by the Association of Environmental & Engineering Geologists (AEG) and the Engineering Geology Division of the Geological Society of America. He is traveling throughout the United States for one year, giving lectures at many colleges and universities. Dr. Marinos received a Mining Engineering degree from the School of Mines of the National Technical University of Athens, Greece in 1966, a postgraduate degree in Applied Geology from the University of Grenoble, France, and his Doctorate in Engineering Geology from the same University in 1969.



THE EDITOR’S MESSAGE:

Please send items of interest for the News from the Campuses and Member News columns, or other things you’d like to share.

Please check the date on your address label – members more than two years in arrears will be dropped from the mailing list. Send dues to Rob Peale (see address on the last page).

Dan Belknap, Newsletter Editor (1998 – present)
<belknap@maine.edu> (207) 581-2159, FAX: -2202

PLEASE CHECK THE DATE ON YOUR ADDRESS LABEL – THIS IS THE DATE TO WHICH YOUR DUES ARE PAID UP. MEMBERS MORE THAN TWO YEARS IN ARREARS WILL BE DROPPED FROM THE MAILING LIST.

GSM WEBSITE: www.gsmmaine.org

The GSM website has been changed to a new provider, which we expect will result in better service. The web address (above) is unchanged.

THE STATE GEOLOGIST’S MESSAGE

New Baxter Park Bulletin completed!

After more than 3½ years of effort, the Maine Geological Survey’s *A Guide to the Geology of Baxter State Park and Katahdin* is published. Conceived as a commemoration of Dabney W. (“Dee”) Caldwell’s life-long enthusiasm for Katahdin, this 80-page bulletin updates earlier publications on Katahdin and Baxter Park by Dee. The bulletin includes more than 75 figures, mostly color photographs, that illustrate important geological features. We were fortunate to have access to superb nature photography from the collection of Bill Silliker, Jr., now housed at the A.E. Howell Wildlife Conservation Center, North Amity, Maine. Although the bulletin presents a scientifically rigorous overview of the geological units of the Park, their origins, and geological processes that have worked upon the landscape, it is written in a style that makes it accessible to all Baxter State Park visitors. The final section includes descriptions of five geological hikes that highlight some of the most significant geological features and magnificent landscapes in the Park.

Perhaps most importantly, the bulletin includes two large-format maps illustrating both the bedrock and surficial geology on a shaded-relief base, which greatly improve earlier maps.

Many individuals contributed to the success of this publication. We are pleased that Douglas W. Rankin, USGS, accepted our invitation to participate in the project, with a particular emphasis on improving the section on bedrock geology. In his early career, Doug spent many summers mapping the intricacies of the Traveler Rhyolite within the Park. Doug graciously accepted our editorial comments over several iterations of the text. I especially thank Gary M. Boone for initiating this project, for his boundless energy in moving it forward, and for his critical reviews of the manuscript and maps.

At the Maine Geological Survey, Bob Tucker oversaw the entire project, Tom Weddle contributed significant improvements to the section on geomorphology and glacial geology, Susie Tolman skillfully implemented numerous map revisions, Henry Berry meticulously edit the manuscript, and Bob Johnston contributed some excellent photographs.

I am sure Dee would be pleased with this fitting tribute to his life.

Robert G. Marvinney, Maine State Geologist:
Robert.G.Marvinney@maine.gov

GSM MEMBER NEWS

Please send member news to:
 Carolyn Lepage, Member News Correspondent
 (1996-present) calepage@roadrunner.com or
 PO Box 1195, Auburn, ME 04211-1195 or
 Phone: (207)-777-1049

GSM SECRETARY'S REPORT

Summer Field Trip, August 6-8, 2010
 Cobscook Bay State Park, Lubec and Cutler, Maine

Many thanks to Joe Kelley for organizing and leading the GSM summer field trip, with help from Bob Johnston and Doug Reusch. The results are described above in the President's Letter. As is our normal operating procedure, no formal Society business was conducted during the field trip weekend.

Submitted by Martha N. Mixon, Secretary.
martha.mixon@gmail.com

GSM TREASURER'S REPORT

The Society currently has 211 members, of which 86% are up to date with their dues. In keeping with policy, we will drop any members more than two years in arrears at the end of this calendar year. The present membership is distributed as follows:

Students:	17	Associates:	16
Regular:	174	Institutional:	4
TOTAL:	211	Total Paid Up:	182

Balance On Hand: May 31, 2010

Anderson Fund Savings	\$ 4,406.16
Anderson Fund CD	\$ 5,970.61
General Fund Money Market	\$ 2,856.51
General Fund Savings	\$ 502.77
General Fund CD	\$ 5,720.92
General Fund Checking	\$ 25.00
Total	\$ 19,481.97

Income

Dues	\$ 767.00
Interest	\$ 35.57
Anderson Fund Donations	\$ 60.00
Other Donations	\$ 0.00
Publication Sales	\$ 0.00
Checks never cashed	\$ 0.00
Subtotal	\$ 862.57

Expenses

Newsletters	\$ 0.00
Honoraria	\$ 0.00
Anderson Awards	\$ 0.00
Other Awards	\$ 0.00
Meeting Expenses	\$ 232.54
Donations	\$ 0.00
Postage	\$ 0.00
Web Site	\$ 0.00
Refunds	\$ 0.00
Miscellaneous	\$ 0.00
Subtotal	\$ 232.54

Balance On Hand August 31, 2010

Anderson Fund Savings	\$ 4,749.06
Anderson Fund CD	\$ 5,985.59
General Fund Money Market	\$ 2,996.52
General Fund Savings	\$ 503.09
General Fund CD	\$ 5,735.28
General Fund Checking	\$ 142.46
Total	\$ 20,112.00
Net gain [or loss]	\$ 603.03

Respectfully submitted,
Rob N. Peale, Treasurer (2004 -present)
<Rob.N.Peale@maine.gov>

The Kennebec Land Trust sent us a thank-you note and copy of their latest newsletter in appreciation of our donation last fall that helped fund their spring 2010 Lyceum that included Alice Kelly and George Jacobsen as lecture presenters.

NEWS FROM THE CAMPUSES

UMaine's New Lineup

The Department of Earth Sciences at the University of Maine has experienced several retirements in the past few years, but has successfully filled most of the empty positions. Tom Kellogg, Joe Chernosky and Steve Norton all retired recently. Tom's position was not refilled, but Alice Kelley became a full-time instructor to take over Joe Chernosky's teaching. Amanda Olsen, a low-temperature geochemist, then refilled Steve Norton's vacant slot. Terry Hughes retired this year. His position is now filled by Gordon Hamilton, who has been a research faculty member of the Climate Change Institute.

MEMBERSHIP DUES STATEMENT

The GEOLOGICAL SOCIETY OF MAINE, INC. (often referred to as **GSM**) is a non-profit corporation established as an educational Society to advance the professional improvement of its members; to inform its members and others of current and planned geological programs in Maine; to encourage continuing social contact and dialog among geologists working in Maine; and to further public awareness and understanding of the geology of the State of Maine; and of the modern geological processes which affect the Maine landscape and the human environment.

The Society holds three meetings each year, in the late fall (Annual Meeting), early spring, and mid-summer (usually field trips). A newsletter, *The Maine Geologist*, is published for all members three times a year. The Society year runs from August 1 to July 31. Annual dues and gift or fund contributions to the Society are tax deductible. There are three classes of memberships:

\$20.00	REGULAR MEMBER	Graduate geologists, or equivalent, with one year of practice in geology, or with an advanced degree.	FEE SCHEDULE AS OF February, 2008
\$20.00	INSTITUTIONAL MEMBER	Libraries, societies, agencies, businesses with interests in or practicing geology and related disciplines.	
\$10.00	ASSOCIATE MEMBER	Any person or organization desirous of association with the Society.	
\$ 5.00	STUDENT MEMBER	Persons currently enrolled as college or university students.	

THE GEOLOGICAL SOCIETY OF MAINE ANNUAL RENEWAL / APPLICATION FOR MEMBERSHIP

Regular Member	\$20.00	\$ _____	Name _____	Make checks payable to: Geological Society of Maine Rob Peale, Treasurer Maine Dept. Environmental Protection, State House Station 17 Augusta, ME 04333-0017
Institutional Members	\$20.00	\$ _____		
Associate Member	\$10.00	\$ _____	Address _____	
Student Member	\$ 5.00	\$ _____		
Contributions to GSM (please write gift or fund on check)		\$ _____		
TOTAL ENCLOSED		\$ _____		

Email Address _____
(GSM funds include the Walter Anderson Fund____, and discretionary gifts as noted by contributor)

2010/2011 SOCIETY YEAR BEGAN AUGUST 1 - PLEASE SEND DUES TO TREASURER.
The DATE on your mailing address refers to PAID UP DUES DATE

THE GEOLOGICAL SOCIETY OF MAINE
c/o Daniel F. Belknap, Newsletter Editor
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THE MAINE GEOLOGIST is the Newsletter of the Geological Society of Maine, published three times a year, in mid-winter, summer, and early fall, for members and associates.

Return Service Requested

Correspondence about **membership** in the Society, **publications** and **dues** should be mailed to:
Rob Peale, Department of Environmental Protection
State House Station 17, Augusta, ME 04333-0017 <rob.n.peale@maine.gov>

Items for inclusion in the **Newsletter** may be directed to:
Daniel F. Belknap, Dept. Earth Sciences, University of Maine,
Orono, ME 04469-5790 <belknap@maine.edu>

President	Julia Daly	UMaine Farmington
Vice President	John Field	Field Geology Services, Farmington, ME
Secretary	Martha Mixon	Consulting geologist
Treasurer	Rob Peale	Maine Dept. Environmental Protection
Newsletter Editor	Dan Belknap,	University of Maine
Directors	Tom Weddle (06-10)	Maine Geological Survey
	Cliff Lippitt, (08-11)	S.W. Cole, Inc.
	3 rd position vacant	