

March, 2014  
Volume 40  
Number 1

## THE PRESIDENT'S MESSAGE

I hope all of you are doing well in 2014 so far. It has been a cold and snowy winter with high points and low points for GSM. On the up side, GSM members helped thwart a recommendation by the Governor's office to eliminate the Maine Certified Geologist program (see separate article). We also have had four new members join in the past month or so. On the downside, Lois Ongley, geology professor at Unity College, passed away on November 16<sup>th</sup>, 2013 (see separate article). Lois contributed much to GSM since settling in Maine and will be missed.

To continue on my theme from past newsletters that geology is a hot science these days, the mainstream press covered an article in late February from the journal Nature Geoscience. The article describes the dating of an Australian zircon crystal as 4.4 billion years old, the oldest "piece of earth" ever found. Most of the major online news sources gave it top billing—it wasn't buried in the Science section. I'm not sure if this is good or bad for geology, but a new disaster movie has come out called "Pompeii". From the ads I have seen, there are a lot of muscular sweaty men swinging swords and beautiful women looking worried. Oh, and there is stuff on fire coming out of a nearby mountain. This is a quote from a review of the movie: "The critics are mixed on whether the volcano is the film's villain or hero".

I hope to see you all at the spring meeting on April 4<sup>th</sup> at Bowdoin College.

<http://uncyclopedia.wikia.com/wiki/Geologist>

Keith Taylor  
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**GSM WEBSITE:** [www.gsmmaine.org](http://www.gsmmaine.org)

## Call for Abstracts For Student Presentations

Spring Meeting of the  
Geological Society of Maine  
Friday April 4<sup>th</sup>, 2014  
Bowdoin College

Submit abstracts by email to: [mparker@bowdoin.edu](mailto:mparker@bowdoin.edu)

Please indicate in the subject line if it's a **GSM poster abstract** or **GSM oral abstract**.

**Mailing Address:** Marjorie Parker, Bowdoin College, Earth and Oceanographic Science Department, 6800 College Station, Brunswick, ME 04011

**Deadline:** no later than **Wednesday, March 19, 2014**

See the GSM website [www.gsmmaine.org](http://www.gsmmaine.org) for an abstract example and more information about the upcoming meeting.

## GSM Spring Meeting 2014 Bowdoin College

Friday, April 4, 2014

<b>1:00 – 2:30pm</b>	Student Poster Presentations, Druckenmiller Hall Atrium
<b>2:30 – 3:30pm</b>	Student Oral Presentations, Druckenmiller Hall Room 016
<b>3:30 – 4:00pm</b>	Business Meeting, Druckenmiller Hall Room 016
<b>4:30 – 5:30pm</b>	Keynote Speaker, TBA, Druckenmiller Hall Room 016
<b>5:30 – 6:00pm</b>	Reception following the Talk Druckenmiller Atrium

Map of Campus -  
<http://www.bowdoin.edu/about/campus/maps/pdf/bowdoin-map-drawn.pdf>

Druckenmiller Hall is #31 on map

Parking: There should be ample parking in the Dayton Lot (site of the old Dayton Arena on Harpswell Rd.) and Coffin St. Lot (off of College St.).

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## THE STATE GEOLOGIST'S MESSAGE

### LEGISLATIVE REVIEW

ROBERT G. MARVINNEY, STATE GEOLOGIST

Although the State budget and Medicaid expansion should rightfully dominate the current legislative session, bills currently being debated by our elected representatives cover a broad range of issues. Here are a few related to geoscience issues:

**Mining rules:** Over the past two years, I have devoted much space in this column to discussion of Maine's mining law and mining rules. The process set in place nearly two years ago by LD 1853, "An Act to Improve Environmental Oversight and Streamline Permitting for Mining in Maine," is coming to conclusion in the Legislature, and the outcome will probably be known by the time you read this. The mining law revisions of 2012 directed the Maine DEP to conduct rule-making based on criteria established in statute, which was completed in summer 2013. The draft rules were subsequently reviewed by the Board of Environmental Protection through a series of hearings and work sessions during late 2013. As required by Maine statute, in early January the rules were returned to the Legislature for review and final adoption or rejection. Anyone who has seen any media coverage in late February knows that the debate has been very contentious. If rejected, rules governing metallic mineral mining will revert to those promulgated in 1991.



**Gold dredging:** Gold fever brought on by record high gold prices created something of a rush a few summers ago to favorable streams by prospectors using mechanized suction pumps and sluice boxes. Activities got out of hand in some areas, prompting property owners to deny access to certain waters for concern that they would be blamed for environmental problems caused by negligent operators. A bill last session tightened the regulations on this activity and limited the season to periods with low potential impact to aquatic species. In the current session, LD 1671, "An Act to Prohibit Motorized Recreational Gold Prospecting in

Certain Atlantic Salmon and Brook Trout Spawning Habitats," sought to prohibit motorized dredging in specific stream reaches. At this writing, several work sessions have explored various amendments to the original bill, but without resolution at this time.

**Ocean acidification:** An impact of increasing atmospheric carbon dioxide concentrations and climate change is increasing acidification as the oceans absorb more CO<sub>2</sub> from the atmosphere, a concern which has received more attention recently. LD 1602, "Resolve, Establishing the Commission to Study the Effects of Ocean Acidification and Its Potential Effects on Commercial Shellfish Harvested and Grown along the Maine Coast" is currently in deliberations. It would establish a commission of stakeholders to begin to summarize potential impacts of ocean acidification on commercial shellfish.

**Geologist certification:** As part of the biennial budget passed in July 2013, the Legislature directed the Governor's Office of Policy and Management (OPM) to identify cost-savings measures within state agencies. Released in September, OPM's report included a recommendation to eliminate the Board of Certification for Geologists and Soil Scientists, suggesting that this could be done "without jeopardy to public safety." In a hearing on January 17 before the Joint Standing Committee on Appropriations and Financial Affairs, eight certified geologists and several certified soil scientists testified in opposition to this recommendation. Ultimately the committee voted unanimously to reject the OPM recommendation to eliminate certification. Thanks to Keith Taylor for carrying the important message of opposition on behalf of GSM.

Robert G. Marvinney, Maine State Geologist:

[Robert.G.Marvinney@maine.gov](mailto:Robert.G.Marvinney@maine.gov)

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### Maine Certified Geologist Program Survives

In September 2013, the Governor's Office of Policy and Management issued a report that recommended various cuts in state agencies in order to save approximately \$34 million as required by a recently passed budget law. Most of the recommended cuts focused on staffing and unfilled positions, but they also included the elimination of the Board of Certified Geologists and Soil Scientists. This Board was founded in 1973 and has performed as intended since

that time, ensuring the high quality of practicing geologists in Maine. Ironically, eliminating the Board would have actually reduced State revenues due to the loss of the \$170/year dues submitted by over 200 Certified Geologists.

In response to this proposal, many GSM members contacted their legislators. On January 17, 2014, about a half dozen GSM members attended the public hearing before the Appropriations and Financial Affairs Committee and testified against the recommendation. Interestingly, rather than focusing on Board elimination, one Committee member asked why the dues were so high. To say the least, the attending GSM members nodded in agreement. On January 24, 2014, the Committee indicated that they will remove the recommendation to eliminate the Certified Geologist Board and in fact may discuss the fees for this board and others.

Thanks to all GSM members who helped defeat this poorly-thought out recommendation!

*Submitted by Keith Taylor*

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**In Memoriam - Lois K. Ongley  
1951- 2013**



It is with great sadness that we report that long time GSM member Lois K. Ongley passed away on November 16, 2013, surrounded by her family. Lois was born March 25, 1951, in Kalamazoo, Michigan. Her family moved frequently within the state of New

York before living in France for three years in the early 1960s. In 1965, the family settled in Wilton, Connecticut, where Lois attended high school. Lois's happy experiences in France sparked a love of language: she eventually became fluent in French and Spanish, with a sprinkling of Russian, Portuguese, and Arabic.

Lois graduated from Middlebury College in 1973 with a B.A. in Geology. She became the first woman at Lamont-Doherty Geological Observatory to work as a shipboard technician on an oceanographic research vessel; somewhere in the North Atlantic she lost the tip of a finger when a piece of equipment slipped. In 1977, she earned an M.S. in Geology at Texas A & M University, where she met her husband Bill while looking for rock climbing partners.

After graduate school, Lois worked as a petroleum geologist in Norman, Oklahoma, where her first daughter Katherine was born. Always interested in mentoring women scientists, Lois was the founding vice president of the Oklahoma chapter of the Association of Women Geoscientists. The family then moved to Houston, where twin daughters Margaret and Jessica were born. Lois remained in Texas for additional graduate work, earning a Ph.D. in Environmental Science and Engineering from Rice University.

After finishing her Ph.D., she taught at Bates College, where she indulged her love of travel by teaching short geology courses in Saudi Arabia and leading summer research projects in Mexico. She also taught chemistry at Oak Hill High School in Wales, Maine.

At the time of her death, Lois had been teaching Geochemistry at Unity College for seven years. She was a passionate instructor, loved by her students and admired by her peers, and a widely recognized expert on arsenic in groundwater. While working at Unity, Lois traveled to Bangladesh to organize low-cost chemistry education packets on behalf of Chemists Without Borders.

Lois loved her adopted home state of Maine, sleepy cats near wood fire stoves, her friends and family, unusual rocks, and traveling to new places. She will be greatly missed.

*Excerpt from Unity College's website*  
<http://www.unity.edu/unity-focus/memory-lois-k-ongley>



## PROFILES OF MAINES COLLEGES AND UNIVERSITIES

This column is the second in a series highlighting Maine's many colleges and universities that offer undergraduate and graduate programs in Geology and/or Earth Sciences.

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### Bowdoin College

**Earth and Oceanographic Science Department**  
6800 College Station,  
Bowdoin College  
Brunswick, Maine 04011  
<http://www.bowdoin.edu/earth-oceanographic-science/>

Bowdoin College is a private, liberal arts college located in Brunswick, Maine. Founded in 1794, Bowdoin has a current enrollment of 1775 students. In the past five years, the Bowdoin College geoscience department has grown from a Geology department with three faculty and an average of 7 majors to an Earth and Oceanographic Science department with six faculty and 28 graduating majors.

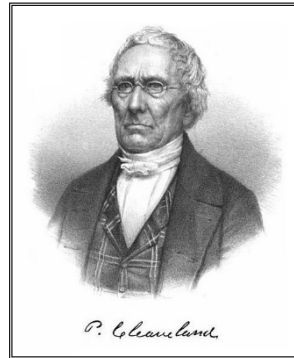


### Location and Facilities

The Earth and Oceanographic Science department is housed in the multi-disciplinary science center consisting of *Stanley F. Druckenmiller Hall*, *Parker Cleaveland Hall* and the *Hatch Science Library*. In addition to the EOS department the science complex is home to the Biology, Chemistry, Biochemistry and Neuroscience departments. Teaching and research activities are further supported by scanning electron microscopy, petrographic microscopy, exploration seismology, and an extensive rock and mineral collection, including specimens collected in the early 1800s by Bowdoin professor Parker Cleaveland. Additional research facilities are located at the 118-acre Coastal Studies Center in Harpswell. Bowdoin

owns and operates a real-time oceanographic buoy deployed since December 2006 in Harpswell Sound. The buoy measures meteorological, physical, and biological properties of the water column, reporting hourly observations in real time with open access to all.

### History



Bowdoin's rich history in geologic education starts in the early 1800's with Parker L. D. Cleaveland, the prominent early American mineralogist. In 1805 he became Bowdoin's first Professor of Mathematics and Natural Philosophy and a few years later added the disciplines of chemistry and mineralogy to his fields of study. During his tenure at Bowdoin Cleaveland built an extensive mineral collection eventually totaling nearly 3,000 specimens. Cleaveland, often referred to as the "Father of American Mineralogy," recognized the need for an American textbook to supplant the European works then in use. His *An Elementary Treatise on Mineralogy and Geology* (1816) was the first book published on American geology and a copy is preserved in Bowdoin's special collections. In 1822 a platy habit of the mineral albite was named *cleavelandite* in his honor. Professor Cleaveland was renowned for his exciting classroom demonstrations, both at Bowdoin and at popular public lectures in Portland, Hallowell and Portsmouth; for his eccentric personality; and for his continuing interest in the Bowdoin men he had taught. (Excerpt from *Parker Cleaveland Collection*, George J. Mitchell Department of Special Collections & Archives, Bowdoin College Library)

Next we jump to the early 1960's with the arrival of the venerable Arthur M. Hussey II to the post of professor of geology at Bowdoin. Arthur is recognized as an expert in the geology of Maine and the northern Appalachians and he has innumerable publications and field trips to his credit. Arthur taught at Bowdoin for almost 40 years and from his office in Hubbard Hall he earned the respect and affection of his many students and associates. Although retired, he remains active in geology attending meetings and leading field trips including GSM's annual field trip this past summer. Arthur maintains a connection to the college with office space in Druckenmiller and is seen on campus from time to time as his busy schedule permits. The Arthur M. Hussey II Prize in Geology

was established by his colleagues in his honor. This prize is awarded annually for an outstanding research project by a senior majoring in geology, with preference for field projects undertaken in Maine. The award recognizes Professor Hussey's lasting contributions to the Department of Geology, notably his ability to inspire students through geological field work. As GSM approaches its 40<sup>th</sup> anniversary this summer we are thankful for Bowdoin's fortuitous decision to add Arthur to its faculty. On July 28<sup>th</sup>, 1974, in Arthur's barn in Bowdoinham with a scruffy crew of 40-odd geologists in attendance, the Geological Society of Maine was founded. Arthur, one of the driving forces behind the formation of GSM, was unanimously elected as the Society's first president and has been an active member ever since.

The last five years of the Geology department at Bowdoin is an interesting story. In 2009 in the process of preparing for an external review the Geology department began a period of assessment and transformation. At that time, typical of the geology departments at New England's small liberal arts colleges, Bowdoin had a solid geologic curriculum and graduated a respectable three to seven majors per year. In 2009 the department consisted of three faculty members: a petrologist, a geomorphologist, and the recent but unusual addition of a physical oceanographer. The departmental review process spawned a series of collaborative retreats where the concept of an integrated earth-systems major was born. As the result of this effort Bowdoin's Geology department was transformed into and renamed the Earth and Oceanographic Science (EOS) department. In order to support this new program the faculty was expanded to include six full time professors, new courses were developed, and the requirements for the major were redefined. As soon as the new department was created students flocked to EOS courses and the major. In 2014 a record number of students continue to be attracted to this innovative, dynamic department.

## Faculty

Bowdoin's current Earth and Oceanographic Science department's faculty members include two faculty focusing on solid earth processes, Rachel Beane and Emily Peterman; two faculty focusing on surficial processes, Phil Camill and Peter Lea; and two faculty focusing on ocean processes, Collin Roesler and Michèle LaVigne. Joanne Urquhart and Catherine Field serve as lab instructors for EOS. Marjorie

Parker, having seen many changes during her two decades at Bowdoin, is the Academic Department Coordinator.

## Academic Program and Research

Bowdoin's EOS Department offers a four year, undergraduate degree culminating with a bachelor of arts in Earth and Oceanographic Science. According to Marjorie Parker, Bowdoin EOS currently has a whopping 51 majors and 5 minors. This does not include sophomores whose majors are undeclared, but as of February of this year 18 sophomores have already chosen EOS as their academic concentration.



According to Professor Rachel Beane, the departmental growth is in part a result of the revised curriculum that leverages the college's coastal Maine location, incorporates authentic research by students, and features an earth system science approach. The curriculum includes: 1) multiple introductory courses with different foci (e.g. solid earth, environmental geology, oceans),

2) an integrative 200-level course in biogeochemistry, 3) a suite of 200-level courses that expose students to the breadth of earth system science, 4) a 300-level research-project course, and 5) a capstone seminar. A key feature of the curriculum is the incorporation of authentic research into introductory and advanced courses. For example, in the introductory courses students investigate local rocks by collecting field data and by using the petrographic and scanning electron microscopes (solid earth course), conduct service-learning projects using real-time water-quality and stream-flow data (environmental geology course), or use MatLab to visualize data they collect from ships in local coastal waters (oceans course).



## UPCOMING MEETINGS OF INTEREST

### SPRING 2014

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#### **Geological Society of America - Northeast Section**

March 23-25, 2014

Lancaster, PA

<http://www.geosociety.org/sections/ne/2014mtg/index.htm>

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#### **Maine Water & Sustainability Conference**

Tuesday April 1, 2014

Augusta Civic Center, Augusta, Maine

#### **2014 Keynote Speakers:**

**Robert Kates**, Presidential Professor of Sustainability Science, University of Maine

*Sustainability Science: Moving Knowledge into Action*

**Mark Borsuk**, Associate Professor, Thayer School of Engineering at Dartmouth

*Gambling with the Globe: The Role of Risk in Decision-Making for Sustainability*

<http://umaine.edu/mitchellcenter/mwc-2014/>

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#### **GSM Annual Spring Meeting**

Friday April 4, 2014 at 1:00 pm

Bowdoin College, Brunswick, Maine

Student presentations & keynote speaker

<http://www.gsmmaine.org>

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#### **2014 Annual Joint Meeting Geological Association of Canada – Mineralogical Association of Canada**

May 21- 23, 2014

Fredericton, New Brunswick

<http://www.unb.ca/conferences/gacmac2014/>

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In the required 200-level biogeochemistry course, students design their own project by applying analytical techniques introduced in the course, e.g. using nutrient spectrophotometry to analyze local soil or water samples they collect. Upper level courses continue the practice of research; for example, in the upper-level oceanography courses, students model circulation in the Gulf of Maine, investigate lowered dissolved oxygen levels in Casco Bay, or study Harmful Algal Bloom dynamics using data obtained from the college's real-time oceanographic bouy. Finally, in the 300-level research-project course, students propose, conduct, trouble-shoot, and present a research project. As a result of participating in research projects throughout the curriculum, students graduate from the department skilled in a variety of observational and analytical techniques, practiced in the process of science, and familiar with how the earth's systems operate in the local area.



For the past three years, undergraduates and faculty in the department have participated together in a multi-day field research seminar focusing on the earth system science of an area. The destination this year was Hurricane Island, hosted by the Hurricane Island Foundation Center for Science and Leadership. Over three days, students made observations, took measurements and drew sketches, with each group presenting their observations to the other groups through informal presentation. During the last afternoon, students collaborated to tell the story of the island from the formation of granite through its quarrying history and made predictions for the island's future with regard to sea level rise.

Check out this entertaining video about their trip:

<http://community.bowdoin.edu/news/2013/10/science-and-adventure-on-hurricane-island/>

Written by Professor Rachel Beane & Carol White



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*The Maine Chapter of the International Appalachian Trail (MCIAT) is hosting the*

**North American Annual General Meeting**  
June 3 to June 5, 2014  
Twin Pines Camps, Millinocket, Maine

The 2014 NAAGM is scheduled for June 3-5 in Millinocket, Maine, at [Twin Pine Camps](#), located at the border of Baxter State Park.. The Maine Chapter will hold its annual meeting in conjunction with the NAAGM as well as celebrate the **20th Anniversary** of the IAT!

[Dr. Cees van Stall](#), Senior Research Scientist of the Geological Survey of Canada, will deliver the Keynote Address. John Neff, and Howard Whitcomb, will speak on the history of the exploration of Katahdin, with an emphasis on the eastern routes, sections of which are now incorporated into the IAT.

<http://www.internationalatmaine.org/>

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**SUMMER 2014 & BEYOND**

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**GSM 2014 Summer Field Trip & Meeting**  
Saturday & Sunday July 19-20, 2014  
Bethel, Maine and vicinity.

**Trip Leaders:** Dyk Eusden of Bates College and Woody Thompson of Maine Geological Survey.

Stay tuned for further details & check <http://www.gsmmaine.org>

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**2014 New England Intercollegiate Geological Conference (NEIGC)**  
October 10 – 12<sup>th</sup> Columbus Day Weekend  
Wellesley College, Massachusetts

<http://w3.salemstate.edu/~lhanson/NEIGC/Conference.html>

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**GSM SECRETARY'S REPORT**

The Executive Committee met in the fall of 2013 and winter of 2014. On September 16, 2013, the Executive Committee met in Augusta and discussed an educational grant request, the financial report from Treasurer Bruce Hunter, a recap of the 2013 summer field trip, planning for the 2014 field trip, and planning and preparation for the GSM Fall Meeting. On January 6, the Executive Committee met in Augusta to discuss the distribution of the newsletter, GSM's response to the

Appropriations Committee on the status of the Maine Certified Geologist program, the GSM website, planning for the summer 2014 field trip, and a vision for generating and distributing funding for educational grants.

The GSM Fall Meeting was held on November 14, 2013 at the Augusta Civic Center. The afternoon program included an excellent series of presentations from local experts on sources of digital data, the application of LIDAR imagery in Maine geology, and the use of digital imagery to construct the timing and stratigraphy of a coastal sand invasion in the Shetland Islands. Copies of these excellent presentations are provided on the GSM website. The business meeting followed the afternoon program.

**Business Meeting Minutes**

The business meeting was called to order by GSM President Keith Taylor.

**2014 Spring Meeting**

The upcoming spring meeting will be held on Friday, April 4 at Bowdoin College in Brunswick.

**2014 Summer Field Trip**

The 2014 summer field trip will explore the geology of Western Maine and the White Mountains. More details will follow as planning progresses.

**Metallic Mining Rules Update**

Bob Marvinney provided an update on the law requiring the Maine Department of Environmental Protection to outline new rules, which were delivered to the Board of Environmental Protection (BEP) in September. A public hearing was held October 17, and the comment period closed October 28. The BEP is conducting internal deliberations, and may accept or reject the rules as proposed or request modifications. The metallic mining rules will again come before the legislature, and there will be an opportunity for public comment.

**Other Business and Discussion**

In response to content from some digital mapping presentations, it was noted that the Maine Office of GIS and the Maine Geological Survey are vulnerable to the actions of a private company, with respect to storage, access, and archiving of public data. Bob Marvinney responded that the state will need to plan for available resources on a regular basis. It was noted that, in a climate of tax cuts, there is a need to advocate (with e.g., legislators) for investments in MEGIS and the Survey.

It was noted that some members miss receiving paper copies of the GSM newsletter, and the suggestion was made to the GSM Board to consider returning to paper copies. Keith Taylor offered to add this issue to the agenda for the next meeting of the Executive Committee.

The business meeting was adjourned at 5:20pm.

Submitted by Lisa Jacob, Secretary  
[ljacob@sanbornhead.com](mailto:ljacob@sanbornhead.com)  
207-347-4723 (office), 207-272-2275 (cell)

**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 a field trip). A newsletter, *The Maine Geologist*, is published for all members three times a year. The Society year runs from Sept. 1 to Aug. 31. Annual dues and gift or fund contributions to the Society are tax deductible. There are four classes of memberships:

\$20.00	REGULAR MEMBER	Graduate geologists, or equivalent, with one year of practice in geology, or with an advanced degree.	<b>FEE SCHEDULE AS OF 2014</b>
\$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 _____	<b>Make checks payable to:</b> Geological Society of Maine Bruce Hunter, GSM Treasurer 44 Old Fairgrounds Rd Readfield, ME 04355
Institutional Members	\$20.00	\$ _____		
Associate Member	\$10.00	\$ _____	Address _____	
Student Member	\$ 5.00	\$ _____		
Contributions to GSM* (please write gift or fund on check)		\$ _____		
<b>TOTAL ENCLOSED</b>		\$ _____	_____	

Email Address \_\_\_\_\_

(\* GSM funds include the Walter Anderson Fund and discretionary gifts as noted by contributor)

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**2013/2014 SOCIETY YEAR BEGAN SEPTEMBER 1 - PLEASE SEND DUES TO TREASURER.**

**THE GEOLOGICAL SOCIETY OF MAINE**  
c/o Carol White, Newsletter Editor  
C.A. White & Associates  
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Yarmouth, Maine 04096  
[cawhitemaine@gwi.net](mailto:cawhitemaine@gwi.net)



Return Service Requested

*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.

Items for inclusion in the **Newsletter** may be directed to:

Carol White, [cawhitemaine@gwi.net](mailto:cawhitemaine@gwi.net); C.A. White & Associates, 1 Main Street, Yarmouth, Maine, 04096

Correspondence about **membership** in the Society, **publications** and **dues** should be mailed to:

Bruce Hunter,; [Bruce.E.Hunter@maine.gov](mailto:Bruce.E.Hunter@maine.gov); Bruce Hunter, GSM Treasurer, 44 Old Fairgrounds Rd., Readfield, ME 04355

**Geological Society of Maine Officers 2013-2014**

President	Keith Taylor	(12-14)	St. Germain Collins
Vice President	Marty Yates	(12-14)	University Maine-Orono
Secretary	Lisa Jacob	(12-14)	Sanborn Head
Treasurer	Bruce Hunter	(12-14)	Maine DEP
Newsletter Editor	Carol White	(12-14)	C.A. White & Associates
Directors	Alice Kelley	(12-15)	University Maine-Orono
	Steve Kelley	(12-15)	Haley & Aldrich
	Chris Morrell	(13-16)	R.W. Gillespie & Associates, Inc.