

President's Message

by
Olcott Gates

In the summer newsletter I mentioned the possibility of following the Vermont Geological Society's lead in developing a research grant program among graduate students, undergraduate students and grades 7-12 teachers. Since then I have received complete information and am having second thoughts to be discussed with the Executive Committee and Directors prior to the Fall meeting. The Vermont program provides for grants up to \$300 based on a three page application, letters of recommendation, approval by a grant committee, accounting for the funds, and abstract of results to be published and/or presented as a talk at a meeting. Administration of the grants thus would require a lot of work by GSM member volunteers and may be too administratively ambitious. A possible alternative would be to have a simpler program that provided modest funds to K-12 teachers for student field trips and research projects including some simple equipment, activities which public school funds would not be able to fund. I think the real need for geological education help is at the public school level.

The administrative policy directives (mainly let the President or Executive Committee decide things) that were steamrolled through the membership at the Bates meeting have worked out OK so far without getting the Society in trouble. I don't anticipate another boring business meeting dealing with administrative problems (trivia?).

I wish I knew how to get more earth science teachers in the Society. What can we do to serve their needs better? Also, should we try to have input into the multi-bucks Beacon school science program?

New Faculty Member at Bates

Lois K. Ongley has accepted a position as Instructor at Bates College in the Geology Department. She will teach hydrology and environmental chemistry courses. Her primary research interest is the transport and fate of organic chemicals in soil and sediment systems.

Ms. Ongley graduated from Middlebury College (1973) with a major in geology. She received an M.S. in geology from Texas A&M University in 1977. Most recently, she earned a Master of Environmental Science from Rice University (1988) and has completed most of the requirements for the Ph.D. from the same institution's Department of Environmental Science and Engineering.

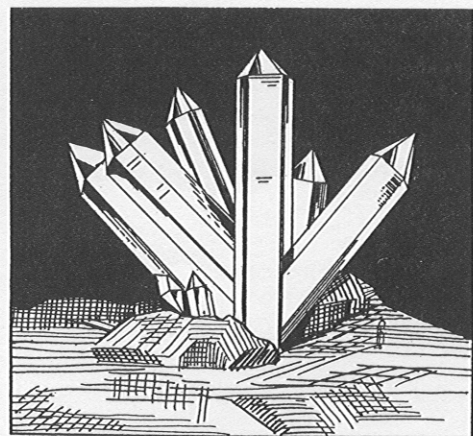
Ms. Ongley has worked as an oceanographic shipboard technician, as an exploration

geologist in the oil and gas industry, and as a geological and hydrogeochemical consultant. Ms. Ongley was the founding president of the Association for Women Geoscientists Foundation, a non-profit corporation whose mission is to encourage the participation of women in geoscience.

Ms. Ongley and her husband, Bill Todd-Brown, have three daughters Katherine, Margaret, and Jesica.

Status of Drill Core Stored by the Maine Geological Survey

Over the past several decades, the MGS has acquired more than 100,000 feet of drill core representing various exploration and mining ventures in the State. Most are housed in a refurbished, 19th century granite arsenal building located near the Survey, but some are stored temporarily at various commercial warehouses. Most recently MGS acquired from the U.S. Bureau of Mines all the cores from their investigations during the 1940s and 1950s, of manganiferous slate in Aroostook County. This collection represents on the order of 50,000 feet of core, all excellently preserved in hardwood boxes. Unfortunately, the Survey is not able to store all of this valuable material in their building. Through review of drill logs, about half of the Bureau of Mines core has been selected for preservation in the building, and the remainder will be disposed of. The Survey will gladly donate any of this material to anyone interested in it. Contact Bob Marvinney of the Maine Geological Survey at 207 287-2801.



GSM - MMRA JOINT MEETING
Mineral (Metal) Exploration and Mining
in Maine
November 6, 1992
Dagget Lounge, Coles Tower
Bowdoin College, Brunswick, Maine

1992-1993 SLATE OF OFFICERS

The Nominating Committee for society officers has received a slate of nominees for the society year 1992-1993. The candidates are the following:

Steve Pinette - President
Jim Hillier - Vice President
Marita Bryant - Secretary
Marc Loiselle - Treasurer
Susan Weddle - Editor
Olcott Gates - Director

A Note on Dues

The Society's year begins on August 1st of each year and runs until July 31 of the following year. The date on your mailing label indicates the year your membership expires; i.e., a date of 9/93 or later means you are fully paid and in good standing. A date of 9/92 or earlier means you are 1 (or more) years behind.

Following through on the announcement in the last newsletter, all members 3 or more years behind (dates 1990 and earlier) have been dropped from the Society's membership roles (the 50 lapsed members listed in the treasurer's report). Members with dues dates of 9/91 (marked in **orange** on your mailing label) have been given 1 more chance to bring their membership up to date by paying their back dues **in full** (\$14.00). If not, you will be dropped from the next newsletter mailing. Members with dues dates of 9/92 will be carried for the year, but we ask you to please pay your dues; until you do, your fellow members are supporting you.

Treasurer's Report as of October 1, 1992

Membership:

Fully paid (1993 or later):	131
Paid through 1992:	106
Paid through 1991:	46
Lapsed members:	50

Finances:

Balance as of 7/24/92:	5146.81
Dues:	843.00
Publications sales:	5.00
Expenses: (Newsletter, etc.)	-1004.17
Balance as of 10/1/92:	4990.64

The spring short course on coastal land loss earned the Society \$281.68; the summer field trip earned the Society \$334.75.

Marc Loiselle, Treasurer

GSM Summer Field Trip Review

by
Olcott Gates

The 1992 summer field trip was held July 25 and 26, led by Bob Gerber and Steve Pinette to Eaton, Pickering, Butter, and Eagle islands in Penobscot Bay. It combined beautiful summer weather, gorgeous scenery, flawless logistics, a great cookout on the beach, an excellent guidebook, knowledgeable guides, and interesting volcanic geology clearly exposed on shoreline outcrops. The 38 GSM members who thoroughly enjoyed all this by unanimous vote thanked Bob Gerber for the use of his Eaton Island, cabin, and camping spots; fellow members of Robert G. Gerber Inc. for helping to provide the libations and cookout; Bob, Fred Beck, and Bob Quinn of Eagle Island for boat trips between the islands; and Bob and Steve for showing us excellent exposures of thought-provoking volcanic rocks.

The trip began about 8:30 Saturday morning at the Deer Island high school parking lot where we left our cars and car-pooled to the dock at Sylvester Cove where we boarded the three boats for Eaton Island. After setting up tents, the rest of the morning was used for a circuit of the island led by Bob for a look at excellent exposures of Castine formation felsic volcanic rocks and three tombolos connecting Eaton with two small islands. After lunch, Bob and Fred ferried us in their boats to Pickering Island where we studied a more varied suite of Castine felsic volcanic rocks and several moraines. On both islands, discussion concerned the origin of the generally massive felsic units and evidence for their dips and strikes. Saturday ended with a great cookout on the beach on Eaton Island as we watched the sun go down across Penobscot Bay while eating hot dogs, sausage, and hamburgers washed down by various kinds of liquid refreshment.

On Sunday, another beautiful day, Bob, Fred, and Bob Quinn gave us a pleasant boat ride across calm Penobscot Bay to Butter Island where Steve Pinette showed us a varied suite of pillow basalts and Castine felsic volcanic rocks most of which were breccias of angular and locally somewhat rounded felsic clasts which he had mapped as part of his M.S. thesis at UMO. After lunch, Bob and Fred ferried us to Eagle Island where Steve continued his guidance through rocks of his thesis area. The rocks here are the North Haven greenstone, a mixture of pillow basalt, chloritic tuffs, diabase, and felsic volcanics. In contrast to the Castine volcanics of Butter Island, the Eagle Island rocks are well sheared to a slaty cleavage and show evidence of at least three deformations. After a brisk walk to the docks at Eagle Island, we boarded Bob Quinn's boat for the trip across East Penobscot Bay back to Sylvester Cove while Bob and Fred took the Gerber Inc. crew back to Eaton to clean up after its invasion by 38 geologists.

For those who could not go on this most enjoyable and instructive field trip, I suggest purchase of any left-over guidebooks through Bob Johnston of the MGS. The only GSM business conducted was the official unanimous vote of thanks to all those who put the field trip together.

THE SCARBOROUGH MAMMOTH
by Tom Weddle

The Maine State Museum with assistance by the Maine National Guard and geologists from the University of Maine and the Maine Geological Survey has undertaken a re-examination of the site in Scarborough, Maine, where an elephant tusk and ribs were found in 1959. The tusk was believed to be that of a circus elephant killed in Maine in 1816, but subsequent work including radiocarbon dates proved the tusk was much older, and probably a mammoth tusk (Caldwell, 1992). As part of the State Museum investigation, a tooth found along with ribs and fragments of tusk, skull, and unidentified bone confirm that the beast was a mammoth. The bones were recovered from the spoils pile of the original 1959 excavation. Plans to continue the search for more material will proceed after the spoils material is thoroughly examined. The exact location of the mammoth bones within the site stratigraphy is still to be determined, however, the original tusk was reportedly recovered from the Presumpscot Formation near the contact with an overlying sand unit. Previously unreported from the site are Portlandia (species?) shells in the Presumpscot Formation below the horizon where the tusk was reported. Dates on the original tusk range from about 10,000 to 11,000 yr BP, however, an AMS-radiocarbon date at 12,720 ± 250 yr BP has been reported (H.W. Borns, Jr., pers. comm. 1992). If correct, this date would require re-evaluation of the timing of the late-glacial sea in the area. Although most radiocarbon dates constrain emergence in southwestern Maine to be complete by about 11,500 yr BP (Smith 1985), a date of 12,820 ± 120 yr BP on in-situ shells from regressive deposits in Topsham is reported by Retelle and Bither (1989). More radiocarbon dates on the mammoth bones and dates on the Portlandia shells, as well as a systematic excavation of the site are still needed to better understand

the story. Persons interested in more information should contact Gary Hoyle of the Maine State Museum.

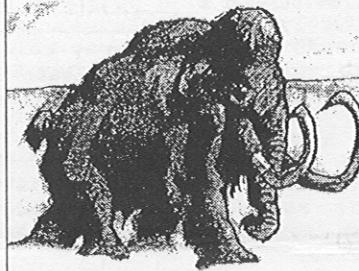
References

Caldwell, D.W., 1992, A mammoth find in the Presumpscot Formation in Scarborough, Maine: Geological Society of America, Abstracts with Programs, V. 24, No. 3, p. 10.

Retelle, M.J., and Bither, K.M., 1989, Late Wisconsinan glacial and glaciomarine sedimentary facies in the lower Androscoggin Valley, Topsham, Maine, in R.D. Tucker and R.G. Marvinney (eds.), Studies in Maine Geology, Vol. 6, Quaternary geology: Maine Geological Survey, p. 33-51.

Smith, G.W., 1985, Chronology of late Wisconsinan deglaciation of coastal Maine, in H.W. Borns, Jr., P. LaSalle, and W.B. Thompson (eds.), Late Pleistocene history of northeastern New England and adjacent Quebec: Geological Society of America, Special paper 197, p. 29-44.

The woolly mammoth...



- Was closely related to present-day elephants.
- Measured more than 14 feet high at the shoulders.
- Had trunks and tusks that sometimes reached as long as 13 feet.
- Had long hair that protected it from the severe cold of the Ice Age.
- Died out about 10,000 years ago.

Photo and vital stats from the Portland Press Herald (with TKW's apologies).



Gary Hoyle shows off the tooth of the Scarborough woolly mammoth.

MEMBERSHIP DUES STATEMENT

The GEOLOGICAL SOCIETY OF MAINE, INC. 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 dialogue 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 four times a year (more or less), approximately on a quarterly basis starting in September. The Society year runs from August 1st to July 31st. Annual dues and gift contributions to the Society are tax deductible. There are three classes of memberships:

- \$7.00 REGULAR MEMBER Graduate geologists, or equivalent, with one year of practice in geology, or with an advanced degree.
- \$6.00 ASSOCIATE MEMBER Any person or organization desirous of association with the Society.
- \$4.00 STUDENT MEMBER Persons currently enrolled as college students.
- \$2.00 APPLICATION FEE A one-time fee to all new members, payable when applying for membership.

ANNUAL RENEWAL/APPLICATION FOR MEMBERSHIP
THE GEOLOGICAL SOCIETY OF MAINE

Regular Member \$7.00/year \$ _____
 Associate Member \$6.00/year \$ _____
 Student Member \$4.00/year \$ _____
 Application Fee \$2.00 one time \$ _____

TOTAL ENCLOSED \$ _____

NAME _____
(Please print or type)

ADDRESS _____
(Permanent mailing address & zip code)

Please make checks payable to:
 THE GEOLOGICAL SOCIETY OF MAINE, INC.
 c/o Marc Loiselle
 Maine Geological Survey
 State House Station #22
 Augusta, Maine 04333

1992/93 SOCIETY YEAR BEGAN AUGUST 1 - PLEASE SEND IN YOUR DUES

THE GEOLOGICAL SOCIETY OF MAINE
 c/o Arthur M. Hussey, II, Department of
 Geology, Bowdoin College, Brunswick, ME 04011

THE MAINE GEOLOGIST is published four times a year, more-or-less, in early Fall, mid-Winter, Spring, and maybe Summer, for members of the Geological Society of Maine, a non-profit educational Maine corporation interested in all aspects of the geology of the state of Maine.

Correspondence about membership in the Society should be mailed to Marc Loiselle, Maine Geological Survey, State House Station 22, Augusta, ME 04333.

Items for inclusion in the newsletter may be directed to Susan Corderman Weddle, 11 Beech Drive, Brunswick, ME 04011.

President Olcott Gates
 Vice President Steve Pinette
 Secretary Marita Bryant
 Treasurer Marc Loiselle
 Newsletter Editor Susan C. Weddle
 Postal Chairman Arthur Hussey

Directors Carolyn Lepage
 Joe Kelley
 Carol White

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