

President's Message

by
Steve Pinette

Since its inception, the Geological Society of Maine has had an education mission. According to its by-laws, GSM was established to

- (1) advance the professional improvement of its members,
- (2) inform its members and others of current and planned geological programs in Maine,
- (3) encourage continuing social contact and dialogue among geologists working in Maine, and
- (4) 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.

To address the first three tasks of its mission, GSM has a very successful tradition of using its meetings, short-courses, and summer field trips as educational forums for geologists. It is now time for GSM to establish a similar tradition of public earth science education to further public awareness and sensible public policy. There are many indications that our efforts are badly needed.

Our society's disregard for the quality of the natural environment and its current preoccupation with it have made geology more relevant to public policy than ever before. Geology affects key public policy issues whose impacts range from local to global. Despite this, the general public and the vast majority of policy-makers are uninformed, or frequently misinformed, about the relevant geological processes. Frequently, the daunting task of informing the public and the policy-makers is performed by a few geologists on an issue-by-issue basis for some very controversial and high-profile issues (e.g., siting a landfill or a low-level radioactive waste repository). Geologists deserve a better opportunity than this to teach the public and the public deserves a better forum in which to be taught geology.

In his 1992 Presidential Address to the Geological Society of America, E-an Zen suggests that we overcome geology's under-representation in science, education, and public policy by improving its visibility and public role ("The Citizen-Geologist", text in GSA Today, January 1993). The Education Committee's year-old effort with teacher education workshops is a strong step in that direction. The Committee's goal is to empower elementary education teachers to teach earth science to their students. This initiative will help students understand fundamental geologic processes and features of their environment so that they can successfully confront the important environmental issues of their time.

The Education Committee's summary of last year's effort and plans for future educational efforts appear later in this newsletter. I urge you to help them out and to volunteer for some of the workshops.

There are other educational efforts in Maine that the Society or individual members may also want to help by offering to give workshops, field trips, or talks. Summaries of some of these educational opportunities appear later in the Newsletter.

SPRING MEETING SCHEDULE GEOLOGICAL SOCIETY OF MAINE

April 8, 1993
Bates College
Lewiston, Maine

- 11am - 1pm Registration**
Carnegie Science Lobby
- 11am - 1pm Lunch on your own**
Chase Hall has lunch available in the Den or Bates Memorial Commons
- 1pm - 2:40pm Oral Presentations**
Carnegie Science Room 204
- 2:40pm - 3pm Poster Sessions and Refreshments**
Carnegie Science Lobby
- 3pm - 4:40pm Oral Presentations**
Carnegie Science Room 204
- 4:40 - 5:30pm Business Meeting**
Carnegie Science Room 204
- 5:30 - 6pm Social Gathering**
Rowe Room, Chase Hall
- 6pm - 7pm Dinner**
Dinner through the line in the Commons. Meal tickets will be available for purchase during registration.
- 7pm "Global Climatic Change"**
Dr. George Denton, University of Maine, Orono
Carnegie Science Room 204

Items to be Discussed at the Spring Business Meeting

The following are some items that will need membership discussion or vote at the Spring Meeting:

- (1) GSM has an opportunity to help sponsor the "Nitrogen in the Environment" Conference (see related summary) by contributing \$200 to support the effort. Does GSM want to pursue this? As a sponsor, GSM would be listed on the program and would probably get some good exposure.
- (2) Do the members approve of the following Education Committee proposals (see related summary):
 - (a) having GSM fund small undergraduate and graduate student research grants;
 - (b) creating an Education Fund to be funded by voluntary contributions from the members (to fund GSM public education efforts, including research grants).

Please contact Steve Pinette if you have items to add to the Business Meeting agenda.

CALL FOR ABSTRACTS

Geological Society of Maine
Spring Meeting
April 8, 1993
Bates College, Lewiston, Maine

Students in Maine colleges and universities and students from other schools working on projects in Maine are encouraged to present papers in oral or poster form at the Spring Meeting of the Geological Society of Maine. This program gives students working on Maine-related senior theses, independent studies or master's theses an opportunity to discuss their research before a professional audience. Abstracts will be published in the issue of the Maine Geologist following the meeting.

Oral presentations are 20 minutes in length which includes five minutes for questions. Slide and overhead projection facilities will be available. Those presenting in poster format will have available two poster boards with dimensions of 6 feet x 5 feet.

Abstracts must be written in accordance with the GSM format and must not exceed 250 words. All of your text must be fit within a 4-1/2" x 4-1/2" box. A sample abstract is available to serve as a guide in preparation; abstract forms are also available. The original and two copies of the form must be submitted. For abstract forms and/or submissions, contact:

Dr. Dykstra Eusden
Department of Geology
Bates College
Lewiston, ME 04240
207-786-6152

Abstracts must be received by March 26, 1993. Late abstracts will not be accepted.

GSM Annual Summer Field Trip July 24-25, 1993

Summers being busy times, it's not too early to mark your calendar for the Annual Summer Field Trip. As always, the trip will occur the fourth weekend of July. This year, members and guests will have a chance to examine bedrock and surficial geology at key locations in southern Maine.

On Saturday the 24th, Tom Weddle will lead us through several exposures of surficial deposits in the Androscoggin River drainage in a preview of a field trip he and others will lead in this fall's national GSA pre-meeting field trip. Other GSM field trip leaders include Mike Retelle, Kathy Bither, and Cheryl Marvinney who will contribute to our guide book and discussions in the field.

On Sunday the 25th, John Creasy will lead an excursion on and around Rattlesnake Mountain in Raymond and Casco to look at unique syenites, nepheline syenites, and associated swarms of trachyte dikes that cut the Sebago Pluton. The Rattlesnake Mountain complex is the most easterly known occurrence of the White Mountain magma series. John's interpretations of this area are published in the Jackson Volumes.

We've made plans for the group to camp Friday and Saturday nights at Recompense Campground, which is owned and operated by the University of Maine system, on Wolf's Neck peninsula in Freeport. This year's field trips promise to be lively and interesting. The oceanfront camp site is beautiful, with plenty of nearby opportunities for family entertainment. I hope to see you in the field.

GSM TREASURER'S REPORT:

For the period November 5, 1992 through February 11, 1993:

Beginning balance: \$5013.60

Income:

Dues, application fees, etc.: \$ 414.00

Publication sales: \$ 34.00

Fall '92 meeting \$ 548.25

Donations to education fund \$ 110.00

Total income: \$1106.25

Expenses:

Fall '92 meeting: \$ 956.75

Map workshop (education fund) \$ 115.00

State sales tax (1992 sales) \$ 5.16

Miscellaneous

(supplies, postage, etc.): \$ 70.00

Total expenses: \$1146.91

Balance as of 2/11/93: \$4972.94

The costs of the fall '92 meeting at Bowdoin College significantly exceeded registrations because of a decision to absorb the costs of room rental, etc. for the meeting. Registration costs covered the snacks and the evening meal, however.

Membership update:

At present we have 264 members in the Society, with 30 members who have not paid their dues since 1991 dropped from the mailing list as of this newsletter...

Of the remaining 264 members, 63 of you have not paid for the present 1993 year. Please check your mailing label; if the date reads 09/92, you still owe for the present year. Please send your dues to:

Geological Society of Maine
c/o Marc Loiselle
Maine Geological Survey
State House Station 22
Augusta, ME 04333

If you see a copy of this newsletter and wonder where your copy is, you may be one of the 30 members mentioned above. If so, you can get back on the mailing list by paying your back dues for 1992 and 1993.

Submitted by Marc Loiselle, Treasurer

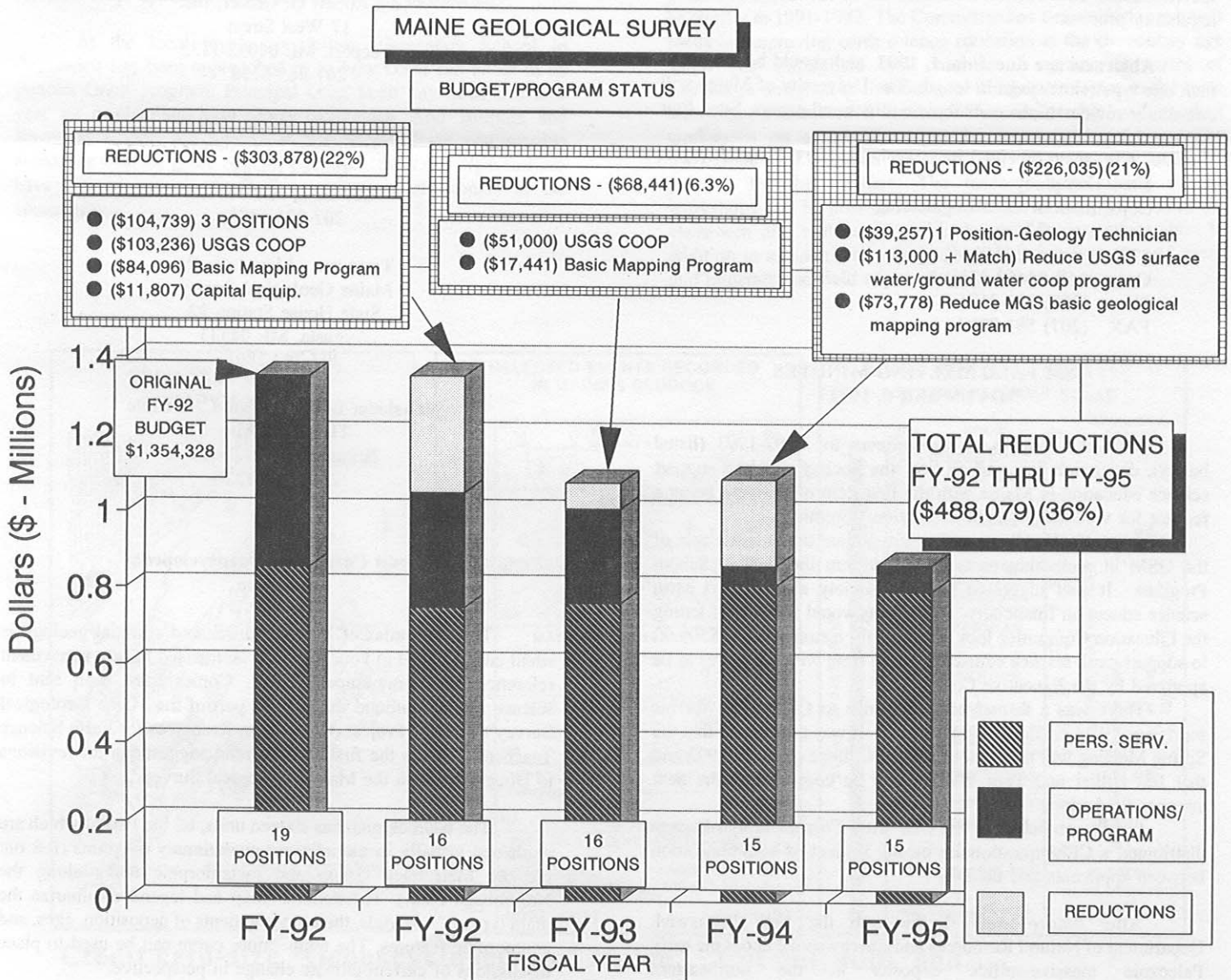
**MAINE GEOLOGICAL SURVEY
BUDGET/RESTRUCTURING UPDATE
by Walter Anderson**

In response to numerous inquiries and my promise to apprise the Geological Society of Maine and the Maine Mineral Resources Association of the current status of the Maine Geological Survey (MGS), Department of Conservation (DOC), I have briefly summarized below the recent budget reductions with impacts, and the current MGS status within the context of restructuring natural resource agencies.

BUDGET: The accompanying graphic summarizes the budget totals and reductions for the MGS. Note that budget figures from FY92 through FY95 result in a \$488,079.00 reduction or 36% of our original FY92 budget. The impacts of these reductions are: (1) The basic geologic mapping program (bedrock, surficial, and marine) will be curtailed and carried out by in-house personnel only; (2) eliminate the MGS/USGS National Mapping Division's 7.5' quadrangle mapping and digitizing co-op with the attendant \$20K USGS match; (3) eliminate the MGS/USGS Water Resource Division's co-op which involves the (a) shutdown of 17 of 45 streamgages in the state network; (b) elimination of 25 groundwater monitoring wells; (c) elimination of the statewide snow survey; and (d) loss of \$113K USGS matching funds; (4) reduction in the MGS technical assistance, publications and the information clearing house function for private and public clients.

RESTRUCTURING: This is an issue that is certain to be addressed during this legislative session. There are several restructuring proposals that are in various stages of development that are now under consideration. It is my understanding that others will surface as the legislative session progresses. The Administration's budget document proposes a merger of DOC and Inland Fisheries and Wildlife into a Department of Forestry, Fisheries and Wildlife. There are no details where MGS fits in this proposal; but, my guess is that it is included(?) in a new agency entitled "Bureau of Resource Management". There is also one legislative and one private sector proposal that merges DOC with the Department of Agriculture. Here again no details on MGS except for the mention of a nondescript Bureau of Resource Management.

I am concerned that the restructuring issue will result in the diminution of our present bureau status and the loss of the name Maine Geological Survey, which describes what we do. This will certainly diminish our accessibility and communication with the public and also reduce our capability to compete for federal and state resources. I would be most interested in your reaction to both the budget and restructuring issue, and seek your advice on how we fulfill our mission in light of the present economic and political uncertainties.



CALL FOR ABSTRACTS

PRACTICAL APPLICATION OF SOIL BARRIER TECHNOLOGY:

An Inventory of Resources For Responsible Technical Policy in Maine

Central Maine (Lewiston or Augusta)
February 9, 1994

The Maine Section of the American Society of Civil Engineers in cooperation with the University of Maine Department of Civil Engineering, the Maine Department of Environmental Protection, and the DEP Task Force will sponsor this one-day symposium. It will address the state of the practice relative to soil barrier technology in Maine. From **Site Assessment** through **Design**, to **Construction** and including **Regulation**, there is a tremendous resource available to the State of Maine for managing wastes with soil barriers. This symposium is designed to develop more effective utilization of this resource by promoting communication between **Scientists, Design Professionals, Contractors, Regulators, and Owner/Operators**. Range of applicability includes solid and hazardous waste landfill facilities including liners and covers. Wastewater and mining applications are also applicable. Anticipated session topics could include soil barrier material characterization and availability; alternate barrier materials; construction inspection; relating environmental risk to risk management; QA/QC issues; method versus performance specifications; construction methods; and appropriate scope of regulatory process.

Abstracts are due June 1, 1993 and should be no longer than one typewritten page in length. The University of Maine will coordinate review of abstracts/topic outlines and papers. Send four copies of the abstract to:

Dana Humphrey
Department of Civil Engineering
University of Maine
5711 Boardman Hall
Orono, ME 04469-5711
Phone (207) 581-2176
FAX (207) 581-2202

GSM FALL MEETING MINUTES NOVEMBER 6, 1992

After the election of the officers for 1992-1993 (listed below), discussion centered on how the Society can best support science education in Maine with the first item of business being a request for volunteers for the Education Committee.

Susan C. Weddle agreed to investigate the possible role of the GSM in promoting earth science within the Beacon School Program. It was suggested that the Society also support earth science education financially. A majority voted in favor of letting the Education Committee look into uses for a sum of up to \$500.00 to support earth science education in the state with such uses to be approved by the Executive Committee.

There was a formal vote of thanks to Ollie Gates for his service as GSM president the past year. It was announced that the Spring Meeting will take place at Bates College in April, 1993 and that Jim Hillier and Tom Weddle will be coordinating the next summer field trip.

Finally, on behalf of the DEP Task Force, Carolyn Lepage distributed a CEM questionnaire on the subject of communication between applicants and the DEP.

After dinner Leslie Fyffe from the New Brunswick Department of Natural Resources and Energy spoke about the early Paleozoic massive-sulfide deposits in the northeastern

Appalachians. His work has been primarily in the Miramichi Highlands in the Bathurst region of New Brunswick, the site of one of the largest volcanogenic massive-sulfide deposits in North America (Brunswick #12). Within the Ordovician and earlier rocks of the host Tetagouche Group the stratiform sulfide zones are associated with shallow marine sediments and rhyolitic-dacitic flows and/or domes, with the sulfide deposits both proximal and distal to the felsic domes. Bimodal whole rock chemistry of the Ordovician rocks of the northeastern Appalachians, including central and coastal Maine, points to a rifting environment. The probable sequence of events consists of a period of explosive volcanism, followed by sulfide deposition, slow sedimentation, and a series of capping felsic flows. The main part of the Tetagouche Group, for example, yields a rift signature and puts the sulfide deposits in a back-arc environment proximal to the Avalon margin. In conclusion, the correlation of Ordovician rocks and stratiform massive-sulfide deposits suggests that base metal massive-sulfides are a better criterium of Ordovician age than deformation or stratigraphy.

Officers elected for 1992-1993:

President - Steve Pinette
3 Heather Lane
Cumberland, ME 04021
207-829-4395 (home)
207-287-3901 (work)

Vice President - James Hillier
c/o Robert G. Gerber, Inc.
17 West Street
Freeport, ME 04032-1133
207-865-6138

Secretary - Marita Bryant
Department of Geology
Bates College
Lewiston, ME 04240
207-786-6473

Treasurer - Marc Loiselle
Maine Geological Survey
State House Station 22
Augusta, ME 04333
207-287-2801

Newsletter Editor - Susan C. Weddle
11 Beech Drive
Brunswick, ME 04011
207-729-6122

Credit Card-Size Geocyclopedia of Maine

This mini-atlas of Maine bedrock and surficial geology is small enough to fit in your wallet. It is intended to be a convenient reference and communication tool. Copies have been sent to science teachers around the state as part of the Maine Geological Survey's CREST Project (Curriculum Resources for Earth Science Teachers). This is the first edition, send suggestions for revisions to Doug Reusch at the Maine Geological Survey.

The bedrock map has sixteen units, all but two of which are explained visually in the adjacent evolutionary diagrams (left out are the Merrimack Group and metamorphic rocks along the Norumbega Fault). The surficial map and legend summarize the main types of materials, their environments of deposition, ages, and geomorphic features. The temperature curve can be used to place discussions of current climate change in perspective.

**EDUCATION PROGRAMS
AND OPPORTUNITIES**

GSM Education Committee Update

Beacon School Program Update

Seven "Beacon Schools" have been competitively selected as test sites for a new mathematics and science curriculum initiative being spearheaded by the Maine Mathematics and Science Alliance (MMSA) and funded by the National Science Foundation. The goal of the Beacon Schools is to develop, practice, observe, and evaluate new strategies for teaching mathematics and science in Maine schools. The seven Beacon School systems selected include Brunswick/Topsham, Houlton, Unity/Thorndike, Athens (Madison), Mount Desert, Scarborough, and York. By transferring the educational lessons learned in the Beacon schools to other Maine schools, the Maine Mathematics and Science Alliance plans to fundamentally change the educational opportunities, performance and aspirations in math and science for all Maine students.

One aspect of the Beacon School program is to involve community members in producing an effective and relevant program; another goal is to provide opportunities for professional preparation and development to educators and education majors. If the Beacon School facilitators have questions or would like information relating to Maine's geology, GSM can be a valuable resource. GSM has approached the MMSA regarding roles that GSM could have in supporting the Beacon School program. As the roles develop, updates will be provided in the newsletter.

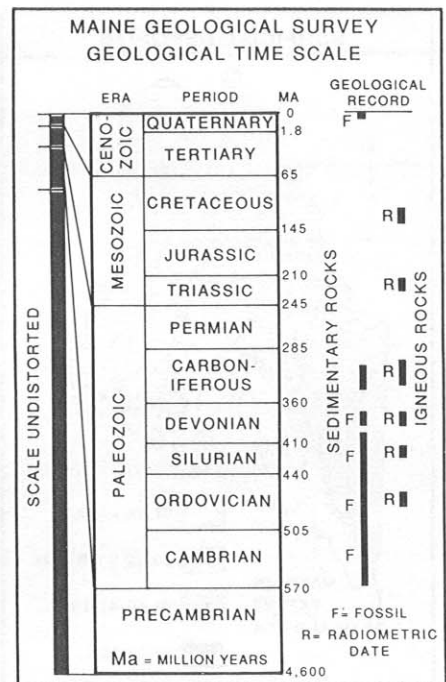
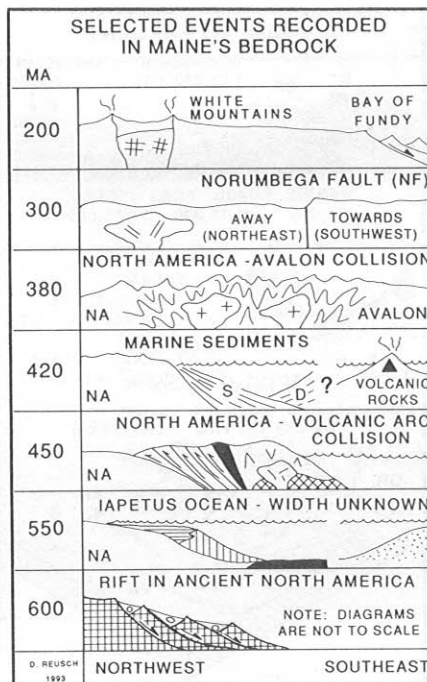
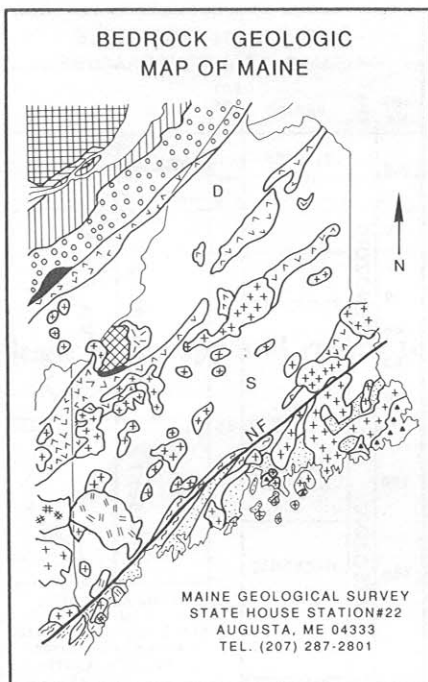
At the local level, Longfellow Elementary School in Brunswick has been approached as to how GSM can assist in this Beacon Grant program. Principal Greg Scott envisions this first year as a planning year. Two facilitators, Ann Billings and Raymond Fisher, are housed at Bowdoin College and provide assistance with the grant. Several local businesses and organizations have offered support, as well as science professionals in the community.

The Geological Society of Maine Education Committee met in December 1992 and January 1993 to discuss goals and objectives and to identify projects for the upcoming year. The Committee has ten members including secondary school teachers, college professors, and geologists working in private practice and with state agencies.

In 1991, to encourage public awareness of earth science, members of the GSM Education Committee sponsored several teacher workshops aimed at introducing earth science topics to elementary level teachers. The Committee targeted this specific group because they felt that many elementary school teachers were uncomfortable with science topics in the classroom. The main reason for this problem seems to stem from the fact the elementary school teachers have a broad background in a variety of disciplines as compared with middle or secondary school teachers who often specialize in a particular subject. Additionally, the middle and secondary school age group have already been targeted with numerous programs sponsored by the National Science Foundation, the Geological Society of America, the Maine Science Teachers Association and other organizations. The committee felt that focusing at the elementary level would help establish student enthusiasm for the sciences at an early age.

Goals and Objectives of the GSM Education Committee

- Based on discussions in the December and January meetings, the goals and objectives of the Committee for the upcoming year will be similar to 1991-1992. The Committee has determined that it will focus on improving earth science education at the elementary age level. The Committee will continue to sponsor a series of workshops designed to introduce the teachers to topics in the earth sciences. Volunteers from the GSM membership will conduct workshops on a specific topic for interested teachers. The workshops will provide materials, lesson plans and hands-on practice for the teachers. The teachers participating in the workshops will be provided with materials that can be used in the classroom and will remain with the workshop participants. In addition to a module on topographic maps, we hope to add rocks and minerals and field trip workshops to our repertoire.



Credit card-size "Geocyclopedia of Maine". Cut out, fold, and....

The Committee also discussed other projects that may merit sponsorship of GSM. These projects include grants to graduate and undergraduate students to support research projects. These grants could be used for such things as thin sections, field equipment costs, etc.. The possibility of a small research grant program will be discussed further at future meetings.

Funding Options - The cost for the teacher workshops generally range from \$100 to \$200 to cover the cost of materials. At their last meeting, the Education Committee voted to recommend to the Executive Board that the \$500 amount appropriated at the last meeting be used to fund this program. This amount should support 2-3 teacher workshops. The expectation is that the Committee will seek alternative funding sources for the future.

It was suggested that funding for future educational activities might come from the Society membership. A box could be added to the membership dues form that would direct a separate donation to support geological education. This suggestion will be brought up with the Executive Committee.

Future Activities - The Education Committee will be compiling a list of interested volunteers who can spare an afternoon or two to complete a teacher workshop. We encourage you to participate in this program. The next meeting of the Education Committee will be held during the April 9th GSM meeting. Anyone interested in geological education is encouraged to attend. If you have any questions about the programs or Committee, please contact Marianne Dubois at 287-2824 or Carol White at 846-5599.

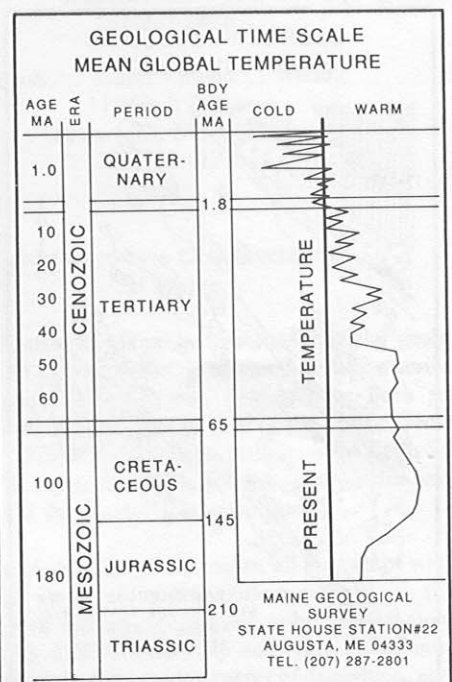
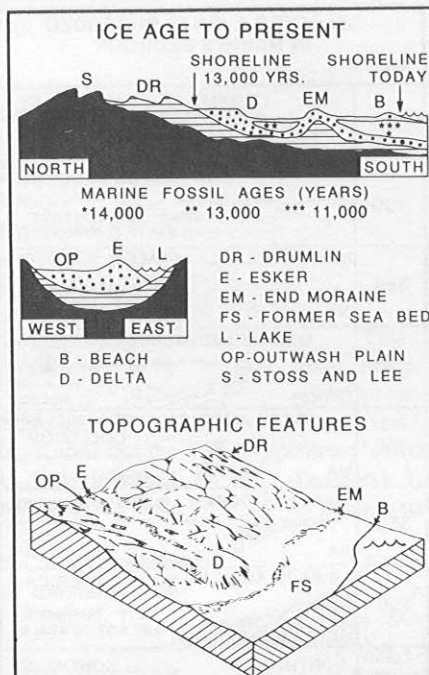
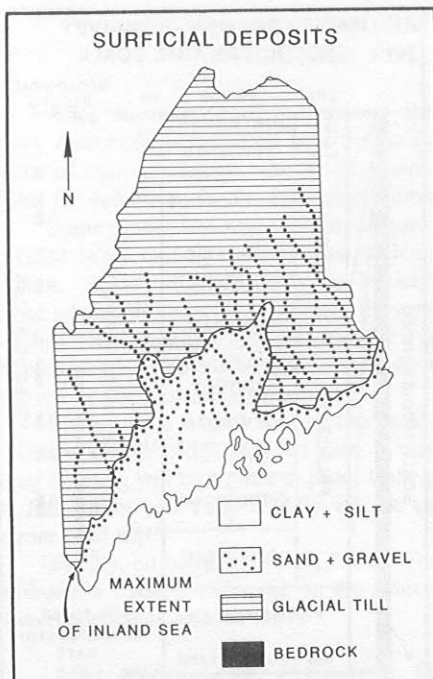
"Earthminders" ITV Environmental Education Sampler Series from Partners in Environmental Education

The Maine Department of Environmental Protection has developed a new program which uses the Maine Interactive Television Network (ITV) to increase the resources available to teachers and improve the delivery of those resources. The most efficient and effective way to reach children is through the schools

and teachers. The program is a series of environmental education shows for teachers to be broadcast to as many as 78 sites statewide. The purpose of the series is to encourage community-based environmental education by introducing teachers to opportunities for integrating environmental materials into their subject areas, providing a means for teachers to discuss environmental issues with individuals "in the trenches" and suggestions for community action projects that involve students.

The series, entitled "EARTHMINDEERS", will showcase various environmental education programs from around the state. Environmental educators will give teachers ideas, materials and hands-on activities to take back to the classroom, as well as provide additional support resources. Programming is scheduled to begin in the Fall of 1993. In addition, two pilot programs will be broadcast this Spring.

"EARTHMINDEERS" is a product of the Partners in Environmental Education, a coalition of 27 organizations whose purposes are to increase environmental awareness, to heighten the sense of individual responsibility to protect the environment and to facilitate grassroots solutions to environmental problems. Other member organizations include all the state natural resource agencies, Maine Environmental Educators Association, nonprofit educational and environmental organizations such as Maine Audubon Society and the Chewonki Foundation, water districts, and faculty from the University of Maine. The coalition was brought together in 1991 by DEP staff in response to an environmental education grant opportunity offered by the U.S. Environmental Protection Agency. Marianne DuBois who works for DEP and is a member of the GSM Education Committee participates in Partners in Environmental Education. She reports to the Education Committee on the activities of the Partners. If GSM decides to participate as a Partner, GSM will have the opportunity to develop a program for the "EARTHMINDEERS" series. The use of ITV would allow us to reach many teachers with a relatively small investment of volunteer time. If you are interested in participating in the development of GSM's ITV program, or would like to learn more about the Partners in Environmental Education, please contact Marianne DuBois at 442-7228.



.....keep in your wallet for reference. Photocopy for your students.

GSM EDUCATION VOLUNTER INFORMATION SHEET

The Educational committee of the Geological Society of Maine is seeking volunteers from its membership to assist teacher workshops and educational outreach programs. There are many ways that you can assist with our program - you can participate in structured workshops for teachers, provide field trips for interested teachers and students, or just be available to answer questions that teachers and students may have. We are putting together a list of interested geologists along with topics and geographic area they are willing to serve. Please help us with this worthwhile endeavor. If you have any questions about the program, please call Marianne Dubois at 287-2824.

Name: _____

Home address: _____

Business address: _____

Home phone _____ **Business phone** _____

Geographic area _____

Topics of interest _____

Please photocopy and return to:

Marianne Dubois
Water Bureau - MDEP
State House Station #17
Augusta, Maine 04333

NEW EDUCATION COMMITTEE CHAIRPERSON

In December, Pat Seaward resigned as chairperson of the Education Committee. She will stay on as a regular member of the Committee. Pat's enthusiasm and tireless work to launch the Committee's teacher workshop pilot program were instrumental in establishing a successful model for GSM's education efforts. Pat, thank you for doing a great job during the Education Committee's critical first year.

Carol White volunteered to serve as interim Chairperson until July. Thank you Carol. Let's support Carol by volunteering to help the Committee.

PROPOSED GSM RESEARCH AWARD

by Tom Weddle

President Pinette has asked that I outline my original proposal for a Geological Society of Maine Research Award. The Vermont Geological Society has instituted a research grant open to graduate and undergraduate students, and to secondary school earth science teachers for active research in Vermont geology. I thought a similar award would be appropriate for the GSM to consider. The subject was discussed by the officers but the concept was not voted on. Several points were brought up, such as the award would not be large enough to interest applicants, and the review of proposals would be too complex to get reviewers. It was suggested by the officers that the award could be subdivided into mini-grants to go to secondary school teachers for educational supplies. At the last Society meeting, the topic was opened to the membership for discussion. As there had been no advance discussion on the subject, very little was accomplished. I hope that my comments will help focus the next discussion on the original intent of the proposal.

I propose that GSM offer this award only to undergraduate or graduate students currently conducting active geological research in Maine. I do not believe that the proposal has to be a complex application, and it could follow verbatim the format of Sigma Xi Grants-in-Aid (2 pages). Whatever the amount of the award, it should provide more than just monetary supplement from the Society. A purpose of the Society is to advance the professional improvement of its members, and the award is one way of helping students pursue a career by bestowing the Society's approval on a deserving individual. The award would be similar in merit to departmental awards to students, most useful as supplementary background information in graduate school applications or business resumes, a reflection of individual prestige as well as potential.

GSM members should consider and discuss the merit of the award with these points in mind and then determine whether it is worthy to offer it up. Come to the next meeting with your thoughts on this subject.

UPCOMING EVENTS

1993 Maine Mineral Symposium

Everyone interested in learning about gems and minerals is invited to attend the Fourth Annual Maine Mineral Symposium in Augusta on the weekend of May 7-9. This annual event is organized by Maine mineral hobbyists and dealers, with assistance from the Maine Geological Survey. The symposium will give "rockhounds" much information about the minerals found in northern New England and adjacent Canada. All indoor activities will be held at the Senator Inn and Conference Center, located just off I-95 on Western Avenue. The program will start with an auction of mineral specimens on Friday night, with all proceeds to benefit the symposium. Saturday highlights include talks, mineral exhibits, and club displays. The lectures will cover topics ranging from the history of the Maine granite industry to the famous

mineral localities of Quebec. Dealers will have a large assortment of minerals for sale at The Senator on both Friday and Saturday nights. Field trips to mines where you can collect your own minerals are planned for Sunday. For details on registration please contact:

Robert Hinkley
Yarmouth Road
Route 115
Gray, ME 04039
(207) 657-3732

The agenda for Saturday May 8 is as follows:

8am	Registration
9am	Introduction and Opening Remarks
9:15am	"Beryl in Maine and its Relationship to the Rest of the World" Vandall King
10am "	"Mineral Localities of Southeastern Quebec" Jerry Van Velthuizen, Canadian Museum of Nature
11am	"Reopening of the Songo Pond Aquamarine Locality, Albany, Maine" Jim Mann
11:30am	Lunch Break
1pm	"Minerals of the Fletcher Mine, North Groton, New Hampshire" Robert Whitmore
2pm	"History of Maine Granite Quarries" Bradford Crafts
2:45pm	"Minerals in Miarolitic Cavities of the Conway Granite, White Mountains, New Hampshire" Gene Bearss

Geophysical Methods in Ground

Water Resource Evaluation

May 12, 1993

Sonesta Hotel

Portland, Maine

This short course sponsored by the Geological Society of Maine will focus on the application of existing geophysical techniques and emerging geophysical technologies toward ground water resource evaluation. Peter Haeni and his colleagues from the USGS Water Resources Division and Fred Beck from Northeast Geophysical Surveys will be teaching the short-course. The morning session will be a tutorial covering selected surface and borehole geophysical techniques and emerging geophysical technologies. The afternoon session will cover instructive case histories that highlight the various techniques. Short-course registration material will be mailed out soon. Please contact Steve Pinette (287-3901), Jim Hillier (865-6138) or Fred Beck (846-6751) for additional information.

A REGIONAL RESPONSE TO GLOBAL CLIMATE CHANGE:

New England and Eastern Canada

May 18-21, 1993

Sonesta Hotel

Portland, Maine

The purpose of this symposium is to share the most recent information on climate change, projected impacts, and policy responses appropriate for the New England states and Eastern Canadian provinces. Through a combination of invited presentations and working group sessions, participants will discuss and formulate recommendations about the management of infrastructure and natural resources in a changing climate. The symposium is directed at planners, scientists, natural resource managers, and policy-makers.

Conference sponsors include the Conference of New England Governors and Eastern Canadian Premiers, University of

Maine, Environment Canada, Agriculture Canada, and National Oceanic and Atmospheric Administration.

The registration fee is \$50. For registration information, please contact:

Nick Houtman
5715 Coburn Hall
Water Resources Program
University of Maine
Orono, Maine 04469-5715
(207) 581-1491

**Lessons Learned in the Remediation
of Petroleum-Contaminated Sites
in Maine**

June 16, 1993
Augusta, Maine

This conference is sponsored by the Consulting Engineers of Maine and the Maine Department of Environmental Protection. It will present an opportunity for the professional community to share key lessons learned in remediating petroleum-contaminated sites in Maine. Ten papers dealing with product recovery, and soil and ground water remediation will be presented orally. The format will allow ample time for discussion. The sponsors are striving to provide conference participants an opportunity to learn from both the successes and failures realized at petroleum remediation sites.

A conference announcement will be published later this spring. For more information, please contact:

Cheryl Fontaine
Lessons Learned in Remediation Conference
Bureau of Hazardous Materials and Solid Waste Control
Maine DEP, Station 17
Augusta, Maine 04333
(207) 287-2651

**Third Annual Canadian Institute of Mining Geological Society
Field Conference**

**"Application of Recent Geological
Concepts to Exploration in the
Northern Appalachians"**

September 9-11, 1993
Bathurst, N.B., Canada

This conference will highlight the rapidly developing geological concepts involved in exploring for base and precious metal deposits hosted by a variety of complex geological settings throughout the Northern Appalachians. The agenda of the conference will include a two-day technical session in Bathurst in combination with the field trips. The following field trips have been tentatively planned: Gaspé/ Quebec (copper porphyry/skarn); Bathurst base metal camp (volcanogenic massive sulphide deposits); North-central New Brunswick (Siluro-Devonian base and precious metals); Newfoundland (base and precious metals); Maine, U.S.A.; Southern New Brunswick (precious and base metals); and Portugal (Iberian pyrite belt).

For more information, please contact:

CIM Geological Society
Third Annual Field Conference
Bathurst '93
P.O. Box 50
Bathurst, N.B.
Canada E2A 3Z1
Phone (506) 547-2070
FAX (506) 546-3994

Nitrogen in the Environment

October 7 or 8, 1993

University of Maine, Orono

Nitrogen is critical to life, but excessive amounts can cause problems in drinking water supplies and estuaries. This one-day conference will provide up-to-date information to resource managers with responsibilities in terrestrial, ground water, fresh surface water and marine environments. Topics presented will include an overview of the nitrogen cycle; human health and environmental impacts; nitrogen in Maine soil, ground water and surface waters; nitrogen from septic systems, agricultural fields, sludge and ash spreading, forest harvesting sites, and landscape management; nitrogen reduction technologies for wastewater; nitrogen modeling in soil and ground water; and special attention to "best management practices" for controlling nitrogen. Most of the papers and oral presentations will be based on research and watershed projects in Maine.

Conference sponsors include the Maine Department of Environmental Protection, the University of Maine (Cooperative Extension and Water Resources Program) and the Maine Department of Agriculture.

A conference announcement will be mailed this summer. For more information, please contact:

Nick Houtman
Water Resources Program
5715 Coburn Hall
University of Maine
Orono, Maine 04469-5715
(207) 581-1491

DEP TASK FORCE UPDATE

by

Carolyn Lepage

At our monthly meetings, the DEP Task Force is continuing to focus on two issues: (1) the quality of applications and other materials submitted to the DEP, and (2) staff accountability. The organizations represented on the Task Force now include the Maine Association of Professional Soil Scientists. I have just completed my year as the private sector co-chair of the Task Force. The DEP's Senior Management Team continues to support Task Force activities.

The results of the CEM questionnaire concerning the DEP's application or technical document review process have been tabulated and presented to the Task Force. I distributed over 20 copies of the questionnaire to GSM members at our November 1992 Annual Meeting. However, only **one** completed questionnaire has been returned to me as of the end of January 1993. If you would still like to provide your input to the Task Force, send me your completed questionnaire. If you need a copy of the form, please give me a call at 865-6138. It's never too late to communicate your thoughts; your input, both positive and negative, will be appreciated.

The Task Force continues to pursue low-cost/no cost opportunities to exchange information on technical topics. The group was instrumental in organizing a conference on soil barrier technology to be held February 9, 1994 in Lewiston/ Augusta. Information on the conference is contained elsewhere in this newsletter. The Task Force also helped organize a conference on oil spill investigation and remediation to be held on June 16, 1993 in Augusta (location to be announced). If you have any questions on either conference, please give me a call.

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 three times a year. 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.

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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.

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