



# THE MAINE GEOLOGIST

THE NEWSLETTER OF THE GEOLOGICAL SOCIETY OF MAINE

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## GSM FALL MEETING

Through the kind auspices of Harold Pestana, Acting Chairman of the Department of Geology at Colby College, the First Annual Fall Meeting of the Society will convene at the Colby geology department at 5 p.m. on Wednesday, November 6th. We will remove forthwith to a 5:30 dinner at one of the Colby dining rooms, and then reconvene for the evening's business.

The principal speaker for the evening will be Mr. Don Hoxie, Director, Health Engineering, Maine Department of Health and Welfare, who will discuss matters of interest or concern to geologists on site evaluation procedures under the new State of Maine Private Sewage Disposal Code.

The business portion of the meeting will be devoted variously to discussion of the structure of the Society; tenure of Officers and Councilors; desirability of seeking incorporation; and such other matters as may be brought before the assembly.

It is important for Harold Pestana to know how many people expect to attend the meeting, so that he may forewarn the dining room management of the extra load. Would all who plan to attend for dinner please advise Harold of their plans **PRIOR TO NOVEMBER FIRST, FIVE DAYS BEFORE THE MEETING.**

## GSM MEETING SCHEDULE

At the moment, the Society plans on three meetings a year - in November, February and mid-summer. The Fall and Winter meetings will schedule discussion of business matters related to the Society, including items of geological interest headed for or residing in the Legislative hopper, and will offer an informative talk by a guest speaker on some subject of specific current interest to Maine geologists. The mid-summer meeting, for some time around August 1st, will be a two-day affair, with papers on environmental and economic geology the first day, and bedrock and surficial geology the second day.

In order to schedule meetings so that they will be at the most convenient time for the largest number of members, we need an expression from the membership on such items as day-versus-night meetings, mid-week-versus -weekend meetings, and so forth. Drop us a line on your thoughts, wishes or needs as to meeting schedules.

Hall	Sedimentology of Silurian and Devonian turbidites in central and northern Maine.
Hussey	Multiple deformation in metamorphic rocks of Small Point area, Phippsburg.
Koller	Petrology of the Lexington batholith in North New Portland.
Ludman	Silurian and pre-Silurian rocks (Kellyland - argillite) in the Calais area.
Osberg	Stratigraphy and structure of coastal belt rocks in western Penobscot Bay area.
Pankiwskyj	Stratigraphy and structure on northwest limb of Merrimack synclinorium in the Kingfield area.
Vehrs	Stratigraphy, structure and polymetamorphism on northwest limb of Merrimack synclinorium in the Stratton quadrangle.

On surficial geologic mapping, Bob reported that as part of a new program of surficial mapping, the Maine Bureau of Geology undertook a number of field mapping projects along the central coast of Maine during the summer of 1974. This project is largely underwritten by a grant from the Coastal Zone Planning Commission, and the information will be used, at least in part, for planning purposes. The mapping included approximately ten or twelve 7 $\frac{1}{2}$ -minute quadrangles in Knox, Sagadahoc and Lincoln Counties. This work follows a season in 1973 where parts of Washington County and eastern Hancock County were completed. Five senior geologists were in charge of this program.

Under a grant from the Land Use Regulation Commission, a large party conducted reconnaissance surficial geologic mapping in northwestern Maine around Rangeley. D. W. Caldwell was in charge of the party, which completed mapping of five 15-minute quadrangles.

The Bureau of Geology intends to add a senior-position surficial geologist to the permanent staff, and over the years to enlarge the scope of the mapping program. At a meeting held in Augusta late in August, a number of surficial geologists agreed that the objective of this program is to complete within ten years a surficial geology map of the State, following a course similar to that taken under Art Hussey's direction for the bedrock map of the State.

## **SOCIETY ORGANIZATION**

As noted in Newsletter Number 1, Officers elected for 1974-75 at the mid-summer meeting include Art Hussey, President; Bill Rideout, Vice President; Gary Boone, Secretary; and J. R. Rand, Treasurer. J. R. Rand was also appointed Newsletter editor. Subsequent to the last meeting, the Officers convened to select four Councilors for the Society who include Vic Kral, Knox Mining; George Eaton, Maine Department of Transportation; Bill Forbes, U.M. Presque Isle; and Hal Borns, U.M. Orono.

Applications for membership in the Society were sent out in August to about 140 geologists who were informal members of the old Maine Geological Society. Primarily to support the publication of the Newsletter, membership fees and dues were established, with three categories of membership: Regular; Associate; and Student. As of October 14th, the Society has 53 paid-in members and a bank balance of \$282.35.

So, we have a going organization and a little money to publish with, and we must now develop the Society to be of interest and benefit to all Maine geologists, representing a wide variety of professional associations and interests -Academic, Highway, Maine Survey, U.S.G.S., Industrial, Mining, Engineering, Environmental -soils, surficial bedrock, groundwater -uplands, lowlands, shorelines and oceans.

The usefulness of the Society to its members and to the people of Maine will derive from the membership itself. Write in, and tell us what you want us to do, or not to do. Define problems that need exposure and discussion. Now that you've sent in your hard-earned money, tell us what you want us to do with it. We're good listeners.

## **BEDROCK AND SURFICIAL MAPPING - 1974**

At the Society's mid-summer meeting at Art Hussey's barn in Bowdoinham, Bob Doyle summarized bedrock studies going forward in -Maine for this year as follows:

Boone	Chain Lakes massif (Precambrian) and related pre Silurian rocks. in the Eustis area.
Gates	Volcanics and related rocks in the Machias area.
Gilman	Kellyland - "argillite" relationships in the Bedding ton and Wesley area.

## **WATER WELLS AND SEPTIC TANKS**

Bill Rideout reports that the Maine Department of Health and Welfare is considering legislation from a consumer standpoint to require a geologic study prior to the drilling of water wells in Maine. The purpose of this legislation, apparently, is to save the homeowner money on the cost of a well by having a geologist locate the shallowest and/or best-bet location for spotting a well. Along with Bill, we also would like to hear comments from members concerning their views as to the feasibility of such legislation. Are there any geologists out there who really believe that, more times than not, they can materially benefit a homeowner in his quest for recoverable groundwater in the bedrock? Or, who believe that Maine well drillers don't already provide an effective and reasonable service in this regard?

On site evaluations for sewage disposal systems, Bill comments that although the Department of Health and Welfare format for recording on-site investigations is not entirely adequate, geologists doing these investigations should be careful to complete the form in detail and in a professional manner, with thorough geologic work and good drafting of maps and diagrams. Health & Welfare will be holding a public hearing in February on the new Plumbing Code, and those geologists who are dissatisfied with the present version should offer their criticisms or suggestions in writing to Mr. Donald Hoxie, Director, Health Engineering, Health and Welfare, Augusta. Geologists contributed very little to the present Code, and technical inadequacies occur in several areas.

## **ATLANTIC GEOSCIENCE SOCIETY**

At the organizational meeting of the Geological Society of Maine at Art Hussey's, Professor Nick Rast, University of New Brunswick, offered some helpful comments on organizing the Society, based on his experience with the recent establishment of the Atlantic Geoscience Society of the Maritime Provinces. He also noted that the publication Maritime Sediments, edited by Dr. B. Pelletier of the Bedford Institute, Dartmouth, Nova Scotia, may undergo modifications of name and become the formal publication medium for the A.G.S. "State-side" contributions would be welcome. The GSM plans to establish a close working relationship with the A.G.S., and to receive announcements of A.G.S. meetings, field trips and other activities.

## **NEW ENGLAND SEISMIC NETWORK**

At the mid-summer GSM meeting, Jim Skehan announced the re-establishment of the New England seismic network. His details on this program follow:

In 1962, the New England Seismic Network was established by Weston Observatory through a contract with the Coast & Geodetic Survey; later with the Environmental Sciences Services Administration; with the National Oceanic and Atmospheric Administration; and currently with the U. S. Geological Survey, as such programs underwent administrative reorganization. Three-component shortperiod stations in Maine at Caribou (CBM), Milo (MIM), and East Machias (EMM); and three short-period components and a longperiod vertical at Berlin, New Hampshire (BNH) comprised the New England Network at that time. Transmission of seismic data was by telephone data lines to Weston Observatory where recordings were made and interpreted. The Maine stations operated continuously until 1968, when reduced funding made it necessary to restrict our distant station activities to BNH, which has continued to operate with only a brief interruption in late Spring 1974.

The U.S. Atomic Energy Commission has awarded to Weston Observatory, Boston College, a 15-month contract for \$44,000, to begin August 1, 1974. The title of the project is "A Study of Seismicity and Tectonism in New England". During the first 15 months of this proposed long-term project, the former New England Network stations will be re-activated and a fifth new station will be established in Kittery, Maine or Portsmouth, New Hampshire, for the purpose of monitoring local seismic events (including quarry blasts). These data

of paths in New England, and developing related preliminary crustal-mantle models for various parts of New England including Maine. Such data will allow preliminary, although tentative, correlations of local seismic events with specific faults. More definitive correlations in most instances, however, will require either a more dense array of stations and/or the use of portable and temporary arrays which we also plan, although not as an integral part of the present program.

## **THE LAST PICTURE SHOW**

As noted elsewhere someplace in this issue, some 140 geologists were solicited in August to apply for membership in the new Geological Society of Maine, with application fee plus dues running \$7 for Members, \$6 for Associate Members, and \$4 for Student Members. The application fee of \$2 is a one-shot charge and will not apply to membership renewals next year. Membership runs for a year, from mid-summer meeting to mid-summer meeting. Fifty-three geologists have joined the Society to date. If your address on this issue of the Newsletter appears in longhand script, you have not been recorded as a Society member as of October 14th.

This issue of the Newsletter will also go out to all 140-odd geologists on our original solicitation list, but henceforth, due to high costs of publishing and mailing, we will mail subsequent issues of the Newsletter and other spot announcements ONLY to paid-in members of the Society. Send in your membership applications TODAY, lest you be left out in the cold and miss the next issue of THE MAINE GEOLOGIST.