

THE MAINE GEOLOGIST

SEPTEMBER 1979

THE NEWSLETTER OF THE GEOLOGICAL SOCIETY OF MAINE

VOL. 6 NO. 1

FALL MEETING ANNOUNCEMENT

TIME - 2 PM, FRIDAY, NOVEMBER 16, 1979

PLACE - THE DARLING CENTER - U.MAINE

WALPOLE, MAINE

SCHEDULE - Business Meeting at 2 O'Clock, to be followed by a Special Presentation (details elsewhere in this Newsletter) by Detmar Schnitker, Kenneth Fink and Larry Mayer (and possibly others) on their geologic & geochemical studies along the coast and offshore

beneath waters of the Gulf of Maine.

NOTE: The Darling Center is on the east shore of the Damariscotta River, about 7 miles south of Damariscotta Village. Take Route 129 south from Route 1, and look for sign & road to your right.

W. A. ANDERSON, STATE GEOLOGIST

At the end of August, Commissioner R. E. Barringer of the Department of Conservation announced the appointment of Walter A. Anderson as State Geologist and Director of the Maine Geological Survey. A 1954 graduate of the University of Massachusetts with a Bachelor of Science in Geology, Walter received his M.S. in Geology in 1956 at the University of Rochester and conducted uranium studies as a Research Assistant at the Pennsylvania State University. Following a ninemonth stint teaching German and Earth Science at the Schalmont School in Rotterdam, New York, he worked for 9 years for Texaco, Inc. at Houston, Texas, engaged in detailed and regional geologic and geophysical subsurface mapping for oil, gas and sulphur deposits, and serving as District Coordinator for electronic processing and as Development Supervisor. Walter came to the Maine Geological Survey as Assistant State Geologist in April, 1968. For the past 8 months since Bob Doyle's retirement, Walter has managed the Maine Survey as Acting State Geologist. We wish him and the Survey all the best in the years ahead.

Annual Meeting 1979

The Annual Meeting of the Society was convened at 2 PM on August 15, 1979 at the Colby College Geology Department, with a standing-room-only crowd of about 70 members and guests in attendance. Donaldson Koons' hospitality was finestkind and appreciated, as were the refreshments provided by the Colby staff.

The first order of business was the elec-

tion of Officers for the 1979-1980 GSM year:

President Vice-President Secretary Treasurer Director-1982 David S. Westerman Bruce A. Bouley Archie W. Berry, Jr. Frederick M. Beck Irwin Novak

In addition, the following appointments were approved: J. R. Rand, Newsletter Editor; Robert G. Gerber, Assistant Newsletter Editor; Arthur M. Hussey II, Postal Chairman; Frederick M. Beck, Membership Chairman.

Thereupon, and guided closely by Walter Anderson's stopwatch and gavel, the meeting proceeded with a couple of interesting hours' worth of brief exposés by numerous attendees representing the Maine Survey, the U.S. Geological Survey, the Nuclear Regulatory Commission and several Colleges, describing 1979 geologic, geochemical and geophysical research projects in Maine. Hardly a stone seems to be left unturned these days. We will look forward to the publications leading from these many studies.

FREE BONUS

I've been telling you all along that this job of Treasurer-Newsletter Editor-Etc. has its Great Moments. Usually they are psychological highs, but one has come along that is TANGIBLE, all 20 pounds and 10 ounces of it. (If you need that in metric, I'll let you figure it out for yourself). Here's what happened...

Back in May sometime, the Library of the Marine Science Institute, University of Texas at Port Aransas 78373, wondered if they could have a copy of MAINE GEOLOGY Bulletin No. 1 on a complimentary basis. Well, the Bulletin wasn't selling all that well anyway so I sent them one. Bang! In the middle of June I received 16 volumes (Nos. 4, 7 through 21) of their most impressive publication Contributions in Marine Science. They seem to deal mostly in biological and zoological (marine) matters, but also discuss diverse oceanographic (oceanologic?) subjects. No hardrock.

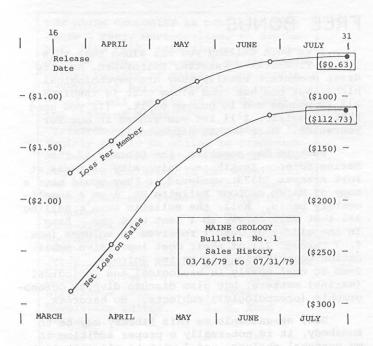
Now, as valuable as this library may be to somebody, it is not really a proper addition to my personal shelves, and I want to place it in a home where it would be most welcome. It really belongs to the GSM, not to me. So, please write me if you truly can use it well, and I'll form a Committee to evaluate applicants and to select the lucky winner. J. R. Rand, Cundy's Harbor, RD 2, Box 210A, Brunswick, Maine 04011.

MAINE GEOLOGY

BULLETIN NO. 1

On March 16, 1979, the Geological Society of Maine announced the publication of the first issue of its new Bulletin series, MAINE GEOLOGY: Shorter Contributions to the Geology of Maine, edited by Arthur M. Hussey II and David S. Westerman. Bulletin No. 1 contains five papers on bedrock and surficial geology, hydrology, saline groundwater and paleontology at Maine locations. A flyer describing the Bulletin and providing an Order Form was mailed on March 24th to some 305 libraries, 221 geological societies and 41 geological surveys in the U.S. and Canada, as well as to the 220-or-so addresses of GSM members, colleges and others contained on our regular mailing list. Complimentary copies were provided to the libraries of all Maine colleges, to the Maine State Library, to GEOTIMES, and to each of the Bulletin's authors and editors.

To July 31st, a total of 121 copies have been sold, for net sales of \$347.70 (not counting \$10.05 Maine sales tax). With total costs to July 31st at \$460.43 for printing, advertising and mailing, we currently show a loss of \$112.73, or about 63¢ per GSM member. As displayed on the accompanying graphic device, our sales are now wholly sluggish, and it looks like the curve may go flat on us at around 60¢ loss per member <u>UNLESS</u> some geo-huckster out there can figure out a way to give us a little push.



Bulletin No. 1 sells for \$2.85 per copy, plus 15¢ Maine sales tax for in-State sales. We don't have an invoicing system down here, so PREPAYMENT is required. You may send your order

and check, payable to THE GEOLOGICAL SOCIETY OF MAINE, to Arthur M. Hussey II, Department of Geology, Bowdoin College, Brunswick, Maine 04011.

THE GEOLOGICAL SOCIETY OF MAINE

TREASURER'S REPORT

FOR THE YEAR ENDED JULY 31, 1979

The paid-up Membership at July 31st included 178 members:

Regular	123	
Associate	31	
Student	24	

YEAR-END BALANCE STATEMENT

RECEIPTS	- Balance over from July 31, 1978 Dues & Application Fees Bulletin No. 1 Sales (Net) (121 Copies) Bulletin No. 1 - Maine Sales Tax	\$ 694.99 825.68 347.70 10.05			
	Total Receipts	\$1878.42			
EXPENSES	Newsletters, Society Notices				
	Printing \$425.14				
	Postage 229.10				
	Address Labels, Supplies 48.40	\$702.64			
	Bulletin No. 1 - MAINE GEOLOGY				
	Printing \$356.81				
	Postage 76.13				
	Labels, Supplies, Refund 27.49	\$460.43			
	Annual Meeting, U.Southern Maine (1978)	105.15			
Overpayment Refunds, Members' Dues Canal Bank Charge, Canadian Check		17.00			
		1.00			
	Total Expenses	\$1286.22			
BANK BALA	NCE, Canal Bank @ July 31, 1979	\$592.20			

RECORD OF DISBURSEMENTS - 1978-79 YEAR

DATE	CHECK #	PAID TO, FOR	AMOUNT
09/15/78	75	Univ.So.Maine: Annual Meeting	\$105.15
09/19/78	76	Color-Ad, Freeport: Newsletter PMTs	6.88
10/02/78	77	Color-Ad, Freeport: Film Negative	5.78
10/04/78	78	NE Direct Mail: Xerox Address List	4.41
10/06/78	79	J.R. Rand: 230 41¢ Stamps (Newsletter)	94.30
10/10/78	80	J.H. French: 300 Newsletters; Invoices	133.46
11/15/78	81	NE Direct Mail: Xerox Abstract Forms	2.16
11/15/78	82	Postmaster, Brunswick: Mailing Permit	30.00
11/17/78		Bank Charge: Canadian Check	1.00
11/30/78	83	EBSCO: V.P.I. Overpaid Dues Refund	2.00
12/02/78	84	Color-Ad, Freeport: Halftone Negative	1.63
12/14/78	85	NE Direct Mail: Xerox Address List	4.00
12/20/78	86	J.H. French: 300 Newsletters	120.00
01/02/79	87	Postmaster, Brunswick: Mail Permit	47.00
02/07/79	88	Allan Ludman: Overpayment Refund	15.00
03/01/79	89	J.R. Rand: 250 Postcards; Xerox; Phone	33.74
03/15/79	90	J.H. French: Print Abstracts, Notices	52.14
03/15/79	91	J.H. French: Bulletin #1, Covers, Bind	144.92
03/20/79	92	U.M.Farmington: Print 300 Bulletin #1	154.20
03/22/79	93	NE Direct Mail: Address Lists, Flyer	7.25
03/24/79	94	Postmaster, Brunswick: Bulletin Flyer	20.63
03/24/79	95	J.R. Rand: Postage, Flyer to Canada	7.50
03/24/79	96	J.H. French: Print 850 Bulletin Flyers	57.69
03/24/79	97	Color-Ad, Freeport: Flyer photo-prints	8.35
04/02/79	98	Color-Ad, Freeport: Photo-scale Abstr's	2.47
04/02/79	99	J.R. Rand: Bulletin #1 48¢ Stamps	9.60
04/05/79	100	J.R. Rand: Bulletin #1 48¢ Stamps	9.60
04/11/79	101	W.J. Metzger: Overpayment Refund	2.85
04/11/79	102	J.R. Rand: Bulletin #1 48¢ Stamps	9.60
04/16/79	103	Color-Ad, Freeport: Newsletter PMT Map	4.57
04/18/79	104	NE Direct Mail: Xerox Address List	2.80
04/20/79	105	J.R. Rand: Bulletin #1 48¢ Stamps	9.60
04/21/79	106	Postmaster, Brunswick: Newsletter Mail	6.80
04/23/79	107	Loring, Short: 9x12 Envelopes, Bulletin	7.86
04/23/79	108	J.H. French: 300 Newsletters	112.09
05/23/79	109	J.R. Rand: Bulletin #1 48¢ Stamps	4.80
06/11/79	110	Loring, Short: 9x12 Envelopes, Bulletin	1.18
06/11/79	111	J.R. Rand: Bulletin #1 48¢ Stamps	4.80
07/03/79	112	J.R. Rand: 260 Postcards, Notices	26.00
07/03/79	113	NE Direct Mail: Xerox Address list	3.36
07/16/79	114	J.H. French: Print 260 Notices	7.45
07/27/79	115	Frost Mimeograph: Xerox Address Lists	1.60
		TOTAL DISBURSEMENTS \$	1286.22

Book Review

By Robert F. Gerath, Thurber Consultants Ltd. 1623 McKenzie Avenue, Victoria, British Columbia, Canada V8N 1A5

GEOMORPHOLOGY. A SYSTEMATIC ANALYSIS OF LATE CENOZOIC LANDFORMS by Arthur L. Bloom. Prentice-Hall Inc. (1978). 510 p. \$22.50

Arthur Bloom is a Quaternary scientist who is well known for his studies of late Pleistocene sea level changes in areas ranging from Maine to New Guinea. In 1969, he published a geomorphology primer; this recent geomorphology textbook is aimed at second year or later earth science students. In his preface, Bloom states that the text is organized along traditional lines. Although a perusal of the table of contents indicates this is generally so, the traditional organization belies a non-traditional content in which the unique constructional and destructional geological processes of late Cenozoic time act as a powerful unifying theme.

The book is organized under 4 major headings: Constructional Processes and Constructional Landforms (Part One); Subaerial Destructional (Erosional) Processes and Landforms (Part Two); Climatic Morphogenesis (Part Three); and Coastal and Submarine Geomorphology (Part Four).

The concepts in this book are nicely set up in the first two chapters. Chapter 1 is an introduction, entitled The Scope of Geomorphology. Here, the author defines geomorphology and discusses the various approaches which may be taken to evaluate the surface features of the land. This chapter ends with three short sections on the holy (and William Morris Davisian) trinity of structure, process and time.

Chapter 2 begins Part One of the book, and emphasizes the geologically unique character of the late Cenozoic Era when continents were generally emergent and when there was intense worldwide mountain building activity, coupled with periods of widespread glaciation and steep climatic gradients. The remaining chapters of Part One include coverage of tectonic landforms and volcanoes.

Part Two begins with a chapter on energy flow in geomorphic systems and an excellent chapter on rock weathering, followed by chapters on karst and hillslope evolution including mass wasting. A suite of fluvial chapters continues to the end of Part Two. Chapters on fluvial processes and landforms dominate the middle reaches of the text because fluvial processes are generally the most important geomorphic agents on the present Earth. In my judgement, Chapter 9 entitled Fluvial Erosion and Transport: River Channels is particularly outstanding and could stand by itself as a summary of the essential elements of quantitative fluvial geomorphology, a topic of great scope which is difficult to approach in a comprehensive manner.

Part Three covers arid landscapes and eolian processes and landforms, followed by three chapters on periglacial and glacial morphogenesis. The last chapter in this section is entitled Alternating Quaternary Morphogenetic Systems. The chapters on glacial processes and landforms will serve the student and teacher equally well by reflecting upon some of the considerable ad-

vances in glacial geomorphology made during the last decade or so. Glacial geology and geomorphology have inherited a confused nomenclature and vague, sometimes inaccurate concepts have remained entrenched. To my emphatic agreement, Bloom warns against using moraine to describe anything but a glacial depositional landform. Perhaps he might have done some more exploration in that dark land between ablation till and icecontact stratified drift, to the benefit of students and others who must build their concepts on the genetic vocabulary of glacial drift.

Part Four contains chapters on coastal and submarine geomorphology in which the theme of late Cenozoic sea level changes is applied to show that modern coasts are highly complex. Indeed, it is often very difficult to sort relict coastal landforms from those which are actively forming.

This book has no distractions such as chapters on air photo and map interpretation or terrain classification systems. Simple mathematics give direct support to the text and never act as abstractions or embellishments. Readers in Maine will be interested to see four photographs from their home state where the author did his Ph.D. research on late glacial sea level changes. The end-of-chapter references are excellent, and chosen because of their general availability. Older, classic studies are not neglected.

The author consistently examines the role of unique geologic and geomorphic processes in the late Cenozoic Era. This unifying theme and Bloom's lucid, often elegent writing sustains the reader's interest, which is a notable characteristic when one considers the turgid style of so much geomorphological literature.

I usually wear the hat of a surficial or glacial geologist. Even after a lengthy explanation of the intent of my fieldwork to curious farmers and loggers, inquiries about unfound gold in the rocks are almost inevitable. Suspicion often appears and lingers when I explain that I am not a mining geologist. In one of a number of perceptive passages in the preface, the author states, "Geomorphology does not provide most of its students with a set of skills demanded by most employers. Instead it provides a background or reference framework in which many specialists practice." The practitioner is often a geologist or an engineer.

Arthur Bloom's book is the best general geomorphology text that I have ever read. I believe that it is a worthy addition to the libraries of both students and professionals.

(EDITOR'S NOTE: Bob Gerath is a New England native who obtained his M.Sc. in Geomorphology from McGill University. Since completing his research on glacial geology in New Hampshire's northern White Mountains in 1976, he has been with Thurber Consultants as a project engineer in their Victoria office, on geotechnical and environmental terrain studies in B.C., Alberta and the Yukon. His special interests are in applications of glacial geology to engineering studies in mountainous regions; terrain hazards; and in systematic approaches to surficial mapping and terrain classification. He is Secretary-Treasurer of the Pacific Margin Section of The Geological Association of Canada, and a long-time GSM member. JRR)

4 CONFERENCES - 1980

The Editors of MAINE GEOLOGY, A. M. Hussey II, B. A. Hall and D. S. Westerman, have announced that manuscripts are now being solicited for publication in <u>Bulletin No. 2</u>. Contributions (or requests for further details as to format, content, etc.) should be directed to Prof. A.M. Hussey II, Department of Geology, Bowdoin College, Brunswick, Maine 04011.

THE NATIONAL NATURAL LANDMARKS PROGRAM

The National Natural Landmarks Program was established in 1963 by the Secretary of Interior to identify and encourage the preservation of areas that illustrate the ecological and geological character of the United States, to strengthen cultural appreciation of natural history, and to foster a greater concern in the conservation of the Nation's natural heritage. The program was transferred from the National Park Service, which had administered it from its inception, to the Heritage Conservation and Recreation Service (HCRS) in January, 1978. The goal of the program is to recognize a variety of significant natural areas which, when considered together, will illustrate the diversity of the Nation's natural history. This aim is realized through the designation of National Natural Landmarks and listing them on the National Registry of Natural Landmarks, which is periodically published in the Federal Register.

National significance is ascribed to geologic features which possess exceptional value or quality in illustrating or interpreting the natural history of the United States, such as:

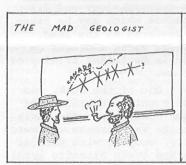
- outstanding geologic formations or features significantly illustrating geologic processes,
- significant fossil evidence of the development of life on earth,
- rare or unique geologic features, and
- sites containing significant evidence illustrating important scientific discoveries.

The New England region is currently being studied under a grant from HCRS by W.A. Niering of Connecticut College, and T.G. Siccama and E.B. Speer of the School of Forestry and Environmental Studies at Yale. They are actively soliciting recommendations for potential National Natural Landmarks in New England from a wide variety of sources, including the Maine Geological Survey. Any recommendations, suggestions or requests for further information should be sent to Lisa Speer, Greeley Memorial Laboratory, 370 Prospect Street, New Haven, Conn. 06511, by November 1, 1979.

In recommending sites for investigation, size and ownership are not relevant. It should be noted that if National Landmark status is conferred upon a site, the owner does not relinquish any of the rights and privileges for use of the land, nor does the Department of Interior gain any possessory interest in lands so designated. In addition, there are provisions for protecting National Natural Landmarks from publicity. These provisions are often invoked in cases when the integrity of an area would be threatened by the invasion of curiosity seekers. (Lisa Speer)

We have a note from Hal Borns advising that The American Quaternary Association (AMQUA) will meet at Orono on August 16-20, 1980. While the details are not yet worked out, the meeting will include both field trips and the presentation of papers. For further information, please direct inquiries to Prof. Harold W. Borns, Jr., Institute for Quaternary Studies, Boardman Hall, University of Maine, Orono, Maine 04473; Phone: 207 581-2532.

O. C. Farguhar has announced plans for a conference on GEOTECHNOLOGY IN MASSACHUSETTS, to be held on Thursday & Friday, March 20-21, 1980, at the Harbor Campus of the University of Massachusetts in Boston. The program will include a wide selection of papers on bedrock & surficial geology, hydrogeology, geophysics, siting of critical facilities, soils & engineering - rock mechanics, use of underground space, energy and the geosciences, industrial rocks, mineral resources, environmental and geochemical problems, tectonics, nearshore zones, the marine boundary, seismicity of New England, plus discussions of new issues and the latest developments. Plenty of everything for everyone, to be presented in 15 sessions varying in length from 20 to 50 minutes. For further details, please contact Prof. Oswald C. Farquhar, Department of Geology, University of Massachusetts, Amherst, Massachusetts 01003.



Art: That was a nice piece of work you did there up on the border.

M.G.: Why, thank you.

Art: Too bad you had to cross it all out (Ha!)

M.G.: Darn you! Nailed again.

BSW

Bermuda Shorts

During the Spring Semester in 1981, the Colby Geology Department will offer a semester abroad in Bermuda. This program will consist of a 3 credit-hour Introductory Oceanography Course, a 4 credit-hour Junior-level Sedimentation Course, and a 5 credit-hour Independent Study Course. Room, board, and library & laboratory facilities will be provided by the Bermuda Biological Station. The Biostation is well equipped to handle student groups. Their library receives 150 journals and contains over 10,000 volumes, and their teaching labs have running seawater and other standard facilities. Boats are available for shallow and deep water field trips. Students participating in this program will have the chance to study coralgal reefs and carbonate environments in the field. Environmental problems of sewage disposal and oil pollution will be observed at first hand, and the many organism-sediment relationships important in sediment production and modification will be examined by the group. This program will run for 9 weeks and will be conducted by Associate Professor Harold Pestana, Department of Geology, Colby College, Waterville, Maine 04901.

DARLING CENTER PROJECTS

By Detmar Schnitker
Department of Oceanography
The Darling Center - UMO
Walpole, Maine 04573

To clear up an apparent lack of awareness among some of the geologist community in Maine as to the work of the Darling Center, I have decided to do two things: 1) to invite the Geological Society of Maine to hold its Fall Meeting at the Darling Center; and 2) to write this brief description of our ongoing projects for the Newsletter. We hope that this description will encourage many members to make the trip to see us on Friday, November 16th.

UMO's Oceanography Department has 8 faculty members, and is housed at the Ira C. Darling Center in Walpole, on the Damariscotta River. Only two of the 8 faculty members are Dona fide geological types; a third can perhaps be claimed 50% by our profession.

Let me start with this ½ geologist. Larry Mayer is our official "Chemical Oceanographer" but his background and current interests keep him close to the bottom, most of the time. In the broadest sense, Larry is looking at the exchange of organic and inorganic compounds and elements between water and sediments (on the bottom and suspended). These efforts get him into the world of nutrient cycling; the fate of trace elements (whether from pollution or natural sources) in the marine environment; the fate of terrestrial organic matter in the marine environment; and, because it is so basic to all of these processes, into the question of where and how these chemical reactions take place - the surface areas and properties of sediment particles.

Ken Fink has been going on two projects: Maine beaches, and trace metals in Maine estuaries. The beach project is simmering down; a Beach Atlas in preparation for the State Planning Office is about completed, and Ken's student, Bruce Nelson, this spring completed his study (i.e., Thesis) on the history of shoreline changes of Maine beaches. Because beach behavior is "news" these days, let me summarize from Bruce's Thesis: over the years (and some observations date back to colonial times), 37% of the beaches showed various degrees of erosion; 31% of the beaches would have eroded were it not for "stabilization" structures; 10.5% of the beaches accreted, probably as a consequence of human activity; 14.5% of the beaches accreted apparently quite naturally; and 12.5% showed no change. The Thesis is on file in the Orono and Darling Center libraries. Bruce intends to publish it after his return to this country.

Ken's trace-metal work, done together with Larry Mayer, seeks to document the behaviour of chromium, particularly from tannery effluents in Maine estuaries.

I myself have recently collected a suite of 19 long piston cores from the deep basins of the Gulf of Maine. This project has two objectives:

1) was there grounded continental ice in the Gulf of Maine during Late Wisconsinan time, was there a floating ice shelf, or just sea-ice?; and 2) what was the oceanographic and climatic evolution of the Gulf of Maine from late glacial to present times? To find out, we'll study sediments, pollen, diatoms, ostracodes, foraminifera, oxygen isotopes, and whatever else might come up.

During this past summer, Franz Anderson from UNH is here at the Darling Center, looking at the erosion, suspension and deposition of fine-grained sediments at a nearby mud flat. The project will go on into next year.

I expect all of us to be present at the GSM meeting in November, and to give you a very brief show-and-tell, plus a tour of our labs for those who are interested.

MEMBERSHIP DUES STATEMENT

At the Annual Meeting of the Society, Frederick M. Beck was elected Treasurer and was also appointed Membership Chairman. If you should wish to join the Society, please fill out and mail the application with your check to the Treasurer. If you are a past member and have not yet paid your dues for the 1979-80 Society year, please send along your check with the renewal form showing your current address.

ANNUAL RENEWAL or APPLICATION FOR MEMBERSHIP - THE GEOLOGICAL SOCIETY OF MAINE

	(Please print or type)
DDRESS	
nnua	(Permanent Mailing Address)
and at	
real act	
	Zip Code
-Please mal	Zip Code ke checks payable to:

Regular Member	\$5 per year	\$
Associate Member	\$4 per year	\$
Student Member	\$2 per year	\$
Application Fee	\$2 One-time	\$
TOTAL ENCI	LOSED:	\$

MAIL TO: FREDERICK M. BECK, TREASURER

The Geological Society of Maine
140 Main Street
Yarmouth, Maine 04096

Seamounts and Faulted Crust

Through Donaldson Koons, we have received an interesting note from Robert L. Houghton, Dept. of Geology, The University of Alberta, Edmonton, Canada T6G 2E3, relative to some of Bob's findings on the configuration of oceanic basement beyond the continental slope off Nova Scotia and New England. During Bob's thesis work at the Woods Hole Oceanographic Institution, on the origin of the New England seamount chain, he obtained several seismic profiles across the chain which indicated that oceanic basement to the north of the chain is 500-1000 meters deeper than crust to the south. As part of her thesis work on the Newfoundland seamount chain, Kathy Sullivan at Dalhousie also noted a basement depression to the south of that chain. A subsequent joint survey of the nearby Fogo seamounts displayed a similar basement offset.

Bob notes that in reviewing existing Lamont seismic profiles, Brian Tucholke has interpreted the existence of a major subsided block of oceanic crust bounded by faults near the New England, Newfoundland and Fogo seamount chains. This feature suggests an anomalous asthenospheric condition in this western North Atlantic region, perhaps associated with the low heat flow reported by Birch for this area.

Bob emphasizes that his subsequent reviews of the available data make it apparent that as one proceeds westward toward the continent along

> The Geological Society of Maine c/o John R. Rand, Cundy's Harbor RD 2 - 210A, Brunswick, Maine 04011

THE MAINE GEOLOGIST is published four times a year, more-or-less, in September, late Fall, late Winter and maybe June or July, 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 Frederick M. Beck, 140 Main St., Yarmouth 04096. Items for inclusion in the Newsletter may be directed to J.R. Rand, Cundy's Harbor, RD2-Box 210A, Brunswick 04011.

President D. S. Westerman Vice-President B. A. Bouley Secretary A. W. Berry, Jr. F. M. Beck Treasurer Director - 1980 R. G. Doyle Director - 1981 R. G. Gerber Director - 1982 I. Novak Newsletter Editor J. R. Rand Assistant Editor R. G. Gerber BULLETIN B. A. Hall Publication A. M. Hussey II Committee D. S. Westerman DICKEY-LINCOLN Committee R. G. Gerber

B. A. Hall

E. D. Koons

J. R. Rand

the New England, Newfoundland and Fogo seamount chains, the vertical displacement in basement depth diminishes, and disappears before reaching the continental shelf, thus indicating the fault structures to have a certain component of hinge.

Res ipse loquitur

If you've been faulting the Postal Service for losing your June Newsletter, don't. Vol. 5, No. 4 (June 1979) never got to the Postal Service because it never got to the printer because it never got written because nobody (other than Bob Gerath: see Page 3, this issue) sent in any News. Imagine: 177 people of a 178-member professional society with nothing to say to each other.

SPRING MEETING 1980

While the exact date has not yet been set, it is pretty well agreed that the 1980 Spring Meeting of GSM will follow the style established by last spring's very successful affair in Chase Lounge at Bates College, with Maine college students presenting papers on their special research projects, to be followed by a business meeting, social hour, supper and one or more featured speakers for the evening. The College Student Program will follow the GSA format, with formal abstracts of papers, slides, etc., in 15-minute talks followed by 5minute discussions. Interested students and professors should start now to make their plans for that meeting. Detailed instructions for preparing abstracts will be provided later this year.

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> > NON-PROFIT ORGANIZATION

Address Correction Requested

WALTER A. ANDERSON Maine Geological Survey Dept. of Conservation Augusta, Maine 04330