

MEETINGS

FORTHCOMING MEETINGSInternational Meeting of the GAC, MAC, MSA, and AZOPR at Queen's University, Kingston, Ontario

August 31 - September 2, 1967.

The societies presenting this joint meeting consist of the following:

- GAC - The Geological Association of Canada
- MAC - The Mineralogical Association of Canada
- MSA - The Mineralogical Society of America
- AZOPR - The Association pour l'étude géologique des zones profondes

Several field trips are planned and arrangements will be made for delegates to visit Expo '67 in Montreal. The technical programme will cover sections on the following:

- I Economic Geology
- II Geochemistry and Petrology
- III Mineralogy and Crystallography
- IV Pleistocene Geology
- V Geomorphology and Groundwater Geology
- VI Geophysics
- VII Stratigraphy and Sedimentology
- VIII Symposium: "Age Relations in High Grade Metamorphic Terrains"

The technical sessions will be from August 31 to September 2, and the total program from August 19 to September 6. All correspondence should be addressed to:

Dr. L. G. Berry, Convention Chairman,
Miller Hall,
Queen's University,
Kingston, Ontario,
Canada.

International Symposium on the Devonian System, Calgary, Canada

September 6 - 8, 1967.

An international symposium on the Devonian system will be held in Calgary, September 6-8 under sponsorship of the Alberta Society of Petroleum Geologists. Over 200 technical papers will provide world coverage of both regional and specific aspects of the Devonian System under the following:

- I Devonian of the World
 - North America
 - South America
 - Africa
 - Europe
 - USSR - Europe and Asia
 - Asia
 - Pacific
- II Devonian Stratigraphy of Special Areas
- III Devonian Reefs and Carbonates

- IV Devonian Biostratigraphy
 - Paleontology
 - Boundaries and Correlations
- V Devonian Clastics
- VI Devonian Evaporites
- VII Tectonic and Igneous Activity
- VIII Paleogeography and Paleoclimatology

In addition, 14 field trips are organized which cover exposures of Devonian Rocks along the mountain ranges from Calgary to the Arctic, and along the eastern margin of the Central Plains. Economic aspects of the Devonian in western Canada, and suites of Devonian rocks and fossils will be exhibited at the Institute of Sedimentary and Petroleum Geology, Calgary. Scientific and commercial exhibits will be shown and the symposium itself will be held at the Southern Alberta Jubilee Auditorium. All enquiries should be addressed to :

International Symposium on the Devonian System,
Alberta Society of Petroleum Geologists,
P. O. Box 53,
Calgary, Alberta,
Canada.

7th International Sedimentological Congress, Reading, England

August 11 - 15, 1967.

This is the final announcement on this symposium which includes extensive pre- and post-meeting field excursions. Enquiries should be directed to:

The Secretariat,
Sedimentology Research Laboratory,
Department of Geology,
Whiteknights Park,
The University,
Reading, Berks, U.K.

International Conference on Stratigraphy and Structure bearing on Continental Drift in the North Atlantic Ocean

August 24 - 30, at Gander, Newfoundland

A number of international specialists have been invited to participate in this conference, which will try to bridge the gap between presentation of prepared papers and discussion of problems in the field (the latter on dry days, if there are any). Field trips are also being arranged before and after the conference. A tentative program of papers and field trips was published in the last issue (2-iii 147-8). Further details from DR. MARSHALL KAY, 310 Schemerhorn Hall, Columbia University, New York, N. Y., 10027.

VI International Congress of Carboniferous Stratigraphy and Geology

September 11 - 16, Sheffield, England.

Field trips before and after. Details from A. W. WOODLAND, Geological Survey Office, Ring Road, Halton, Leeds 15, England.

REPORTS OF RECENT MEETINGSThe Atlantic Universities Geological Conference 1966 - Summary
November 11 - 13, 1966

In 1966 the annual Atlantic Universities Geological Conference was jointly sponsored by the Dawson Geological Club of Dalhousie University and the Mining and Metallurgical Society of the Nova Scotia Technical College. There were 92 registrations of which 65 were undergraduate students in the earth sciences. The majority of these were students in the lower years, reflecting the increased enrollment in Geology and related fields. Eleven professors attended and a number of graduate students, along with representatives from the Nova Scotia Department of Mines, and the Bedford Institute of Oceanography. We also welcomed representatives from Cameron and Cameron, the International Nickel Company and Mobil Oil of Canada. Participating clubs and presidents were:

- The Fletcher Geology Club of Acadia University, Nova Scotia
President - Mr. Peter Giles
- The Alexander Murray Geology Club of Memorial University of Newfoundland
President - Mr. Bill Taylor
- The Mining and Metallurgical Society of the Nova Scotia Technical College
President - Mr. John Amirault
- The Dawson Geological Club of Dalhousie University, Nova Scotia
President - Mr. Barton Stone
- The Fairbault Geology Club of St. Francis Xavier University, Nova Scotia
President - Mr. Wynn Potter
- The Gesner Geological Society of Mount Allison University, New Brunswick
President - Mr. Jim Cleveland
- The Bailey Geological Society of the University of New Brunswick
President - Mr. Bren Jones

Saturday was devoted to the following student papers given at the Nova Scotia Technical College in the morning, and at Dalhousie University in the afternoon. Mr. Dave Johnson, a second year student at Mount Allison University, presented a paper on Geophysical Prospecting, dealing with his summer work on a Kerr-Addison field party, which surveyed a geophysical anomaly in detail. Mr. Gerry Mazerolle, a fourth year student at St. Francis Xavier University, presented An Examination of the Grenville Project using material obtained during a summer with the Geological Survey of Canada. The problem of the Superior-Grenville boundary was also discussed. Mr. Alan Ruffman, of Dalhousie University, gave a short talk on the opportunities for overseas experience available to graduating geologists through the Canadian University Service Overseas (CUSO). After coffee, Mr. Frank Campbell, a graduating student at Nova Scotia Technical College, gave a talk on their Pilot Plant. Following the talk everyone moved into a building filled with the roar of the crushers, and watched pyrite being separated from the ore.

After lunch the Conference moved to the Sir James Dunn Science Building at Dalhousie. Mr. Rex Gibbons a graduating student at Memorial University, started the afternoon session with a paper on Pegmatite Occurrences in Newfoundland. His talk pointed out the distinct lack of such commercial deposits in Newfoundland. Mr. Ron MacNeill a student at Acadia University, presented a talk on Problems in Exploration in the Yukon Territory. Again, the benefit of a summer's experience was evident in his illustrated talk. Mr. Bruce Rogers a third year student at Dalhousie University, presented Groundwater Evaluation in the Annapolis Valley of Nova Scotia. Mr. Rogers worked for a year with the Groundwater section of the Nova Scotia Department of Mines. The final paper of the conference was presented by a University of New Brunswick fourth year student, Mr. Gordon Pringle. In his

paper, A Study of the Mascarene Group of Charlotte County, New Brunswick, he reviewed UNB's continuing field school project of mapping this group and related structures.

On Saturday evening a banquet was held, with a full turnout, at the Citadel Inn in Halifax, and Dr. B.R. Pelletier, Chief of the Marine Geology Section at the Bedford Institute of Oceanography, presented an illustrated talk on the Polar Shelf Project; a talk that sent us all after our field gear.

On Sunday, Dr. David Hope-Simpson of St. Mary's University led a field trip to Portuguese Cove. Here the structure of the Meguma Series and its contact with the Devonian granite were examined. The other trip visited the National Gypsum quarry at Milford and Mr. J.R. Cameron of the company gave them an excellent tour. After lunch the field trip moved to the quarry of the Nova Scotia Sand and Gravel Company, where they were shown around by the pit manager.

ALAN RUFFMAN

A Workshop on Geological and Geophysical Studies on Canada's Eastern Seaboard from Nova Scotia to Nares Straits, February 23, 1967

An informal workshop on studies of Canada's eastern seaboard was held on Thursday, February 23, in the Department of Geology, Dalhousie University. Its purpose was to allow all geologists and geophysicists in the area to become acquainted with each other's work. Institutions represented were Dalhousie University, Bedford Institute of Oceanography and Nova Scotia Research Foundation; Dr. C. L. Drake was, happily, visiting from Lamont Geological Observatory.

Dr. L. H. King led a session on marine geological studies on the Scotian Shelf and slope, Grand Banks area and the north Newfoundland and Labrador shelves. The session began with King describing his own work on the Scotian Shelf, emphasizing particularly his technique of using fathograms to determine bottom-sediment type and his studies of morainal deposits on the shelf. He pointed out the occurrence of submarine morainal ridges lying 50 miles off Nova Scotia and roughly paralleling the coast line. Dr. J. I. Marlowe then explained his work on the stratigraphy of The Gully, a canyon in the continental slope close to Sable Island, which has Tertiary sediments exposed on its sides. Dr. Marlowe has been collaborating with Dr. G. A. Bartlett on the microfauna obtained from dredge hauls in The Gully. Dr. Bartlett then talked about the Tertiary foraminiferal assemblages from The Gully and Recent Foraminifera from the near-shore areas. Moving away from the Scotian Shelf, Dr. R. M. McMullen reported on his studies of bottom sediments from the Grand Banks off Newfoundland, including grain-size distribution and heavy mineral suites. In closing the session, Mr. A. C. Grant described marginal channels and transverse troughs from the Labrador and north Newfoundland and shelves, showing that the channels are found at the boundaries between crystalline and sedimentary rocks, and are likely to be erosional features.

Mr. G. N. Ewing reported on the seismic studies he had made of the Gulf of St. Lawrence, and this discussion was continued by Mr. A. M. Dainty. These bear not only on the deep structure of the Appalachian geosyncline, but also upon the change in geological structure across the Laurentian Channel. Ewing went on to describe measurements of gravity and magnetic fields over Orpheus anomaly, east of Chedabucto Bay. It became clear that the Laurentian Channel crosses many geological features, that its present topography was glacially controlled and that the hypothesis that its margins are those of a two-sided rift system is not tenable. Dr. M. J. Keen discussed studies by C. E. Keen and Dr. B. D. Loncarevic of the changes in the upper mantle from continent to ocean basin - relevant also to the deep

structure of the Gulf, and commented also on studies by Mr. B. Fenwick of the margin northeast of Newfoundland. Very large magnetic anomalies run parallel to the shelf and slope, a direction which is across the strike of any extension of the Appalachian System.

Mr. D. L. Barrett and Mr. K. S. Manchester spoke of their studies in Labrador Sea, Davis Strait, Baffin Bay, and Nares Strait. Geophysical studies show clearly that there is no large magnetic anomaly in the central part of Baffin Bay, although there are large anomalies on the western margin - and little evidence can be found of any sort to support the existence of a Mid-Ocean Ridge in the Bay. Dr. B. R. Pelletier spoke of geological studies in Nares Strait, from which no evidence of large displacements parallel to the Straits can be found, although considerable evidence existed for vertical crustal movement. Manchester pointed out that a rather limited magnetic survey showed that structures continue across the Straits. Barrett showed that Cretaceous and Tertiary lavas on western Greenland and eastern Baffin Island were continuous across the southern end of Baffin Bay. These studies may make it possible to put an upper limit on the time before which Greenland and Canada separated one from the other, if of course they were together at any time.

The workshop was followed by a seminar by Dr. Drake, on transitions from continents to ocean basins, in which he developed the analogy of modern continental margins as the counterparts of ancient geosynclines.

M. J. KEEN
Institute of Oceanography, Dalhousie University

Northeastern Section, Geological Society of America, Annual Meeting, Boston, Mass., March 16 - 18, 1967

In its second year, the annual meeting of NSGSA has proved itself an important event of the geological year for geologists in eastern Canada and north-eastern United States. Without the program pressure of the big meetings it is happily possible to hear a good proportion of the papers presented during the three days. Despite one of this winter's most severe blizzards, which closed Boston airport for nearly 24 hours, the attendance at the meeting was excellent. Unfortunately several papers on the first day had to be cancelled or rescheduled due to the author's inability to reach Boston. In spite of this inclemency on the part of the weather, however, there was no lack of warmth in the reception accorded members when open houses were held at Massachusetts Institute of Technology and Harvard University on the Friday night.

For most of the time only two simultaneous sessions were in operation. Sessional topics included Bedrock Geology of the Northern Appalachians, Marine Geology, Hydrogeology, and Quaternary Geology of the North-East, as well as the more usual subdisciplines. A good proportion of the papers concerned New England geology with several from areas in northern Maine. The Maritime Provinces were represented by five on marine geology, two on Pleistocene studies, and one dealing with orogenic history; two others concerned Newfoundland geology. Of particular interest to sedimentologists in this area were the symposia on Marine Geology and Quaternary Geology of the northeast, and the session on Stratigraphy and sedimentation. The one session of the symposium on Quaternary geology and the session on sedimentation were run concurrently which made it next to impossible to get all the papers of personal interest in both sessions. The symposium on marine geology was very well attended, showing that interest in this field is growing quickly.

After the annual luncheon, Dr. R. R. Shrock of the Massachusetts Institute of Technology gave a talk on "Oceanographic Activities along the northeastern Atlantic Seaboard". In his talk, Dr. Shrock described the development of oceanography as a science, the development and programs of oceanographic research laboratories and establishments from New York to Nova Scotia, and the participation of the United States federal government in oceanographic research.

Perhaps the highlight of the meeting was Dr. J. Tuzo Wilson's speculation about the Atlantic Ocean rift ("Did a Lower Paleozoic Ocean through New England close and then open to form the Atlantic"?) illustrated by cardboard pull-apart models apparently unaided by anything up his sleeves.

Titles of most of the papers given were included in the last issue of MARITIME SEDIMENTS (2-iv, 210-212) and all the papers and their abstracts were published in the program for the meeting. Other papers subsequently added included:

F. D. Anderson: Structure of the Bay d'Espoir Group, Newfoundland.
 D. G. Benson: Orogenic history of northeastern mainland, Nova Scotia.
 V. K. Prest and D. R. Grant: Late glacial history of Nova Scotia and Prince Edward Island.

D. J. C. LAMING and R. M. McMULLEN

Eastern Section, Society of Economic Paleontologists and Mineralogists
March 18, 1967

The First Annual Business Meeting of the Eastern Section of the SEPM was held at 8:00 A. M. on March 18, 1967, in conjunction with the second annual meeting of the Northeastern Section of the G. S. A., in Boston, Mass. The purpose of the meeting was to elect officers for the coming year, to approve a constitution for the Section, to formulate plans for field trips during 1967 and 1968 and to acquaint potential members of the Section with its aims and policies.

The following officers for 1967-68 were elected unanimously:

President - G. M. Friedman, Rensselaer Polytechnic Institute, Troy,
 New York
 Vice-President - J. R. Beerbower, McMaster University, Hamilton
 Ontario
 Secretary - G. deV. Klein, University of Pennsylvania, Philadelphia, Pa.
 Treasurer - D. J. C. Laming, University of New Brunswick, Fredericton,
 N. B.

A committee to nominate the executive for 1968-69 was also appointed and is made up of G. M. Kay, Columbia University, New York, N. Y. (Chairman); R. A. Park, Rensselaer Polytechnic Institute, Troy, N. Y.; and D. J. Stanley, Smithsonian Institution, Washington, D. C.

Specialist field trips, with a limited number of participants, are one of the main activities planned for the Eastern Section. Plans for three of these were announced, two of which are scheduled for this year:

- 1) Intertidal sedimentation in the Economy Point - Five Islands - Parrsboro area, Minas Basin, Bay of Fundy, Nova Scotia; led by G. deV. Klein, University of Pennsylvania. This trip is tentatively scheduled for late June, 1967 and is limited to the first 15 applicants.
- 2) Deep water marine sediments of the Upper Hudson River Valley (Normanskill, etc) led by G. V. Middleton, McMaster University, and J. M. Bird, New York

State University, Albany, N. Y. This is tentatively scheduled for late September, 1967.

- 3) Nearshore, marine sediments in Delaware and environs led by J. C. Kraft, University of Delaware. This is tentatively scheduled for May or early June, 1968.

The policy of the section at the moment is that field trips are open only to members of the Section, or equivalent, who are interested in the special fields of study. They are not to be thought of as student field trips; a suggestion was made to have special student field trips to look after their interests. Another suggestion was made that specialist cruises might be arranged for those interested in marine geology. Any other suggestions as to types of field trips or geographical areas in which to run them would be gratefully received by any member of the executive.

The geographical limits of the Eastern Section embrace Eastern North America from the Potomac River to the Arctic and from the Ohio-Pennsylvania border or its extension to the Atlantic. The annual dues for membership in the Section were set by the meeting at \$2.00. Membership in the Section is open to all geologists interested in the fields of paleontology, sedimentary petrology, sedimentology and stratigraphy, who reside within the specified geographical area. All SEPM members living in this area will automatically become members, on payment of \$2.00, but it is not necessary to be a national SEPM member to be a member of the Section. Acceptance of all other membership applications will be at the discretion of the executive. Those interested in joining the Section or in obtaining further information about it should contact the Secretary, G. deV. Klein, Department of Geology, University of Pennsylvania, Philadelphia, Pa., 19104.

R. M. McMULLEN

Nova Scotia Institute of Science, Biology Building, Acadia University,
Wolfville, N.S., April 10, 1967

A joint meeting of the Halifax and Valley Chapters of the Nova Scotia Institute of Science was held at Acadia University on April 10. Of interest to readers of MARITIME SEDIMENTS was a talk given by Dr. H. B. S. Cooke, department of geology, Dalhousie University, on "Elephant teeth from the Atlantic Continental Shelf". Other authors of this contribution are Dr. F. C. Whitmore Jr., U.S. National Museum; Dr. K. O. Emery, Woods Hole Oceanographic Institution; and Dr. D. J. P. Swift, Puerto Rico Nuclear Centre. Through analysis of 42 elephant teeth from the shelf and with additional statistical treatment of the data, Dr. Cooke was able to show that the elephants were different from other fossil species, although having affinities to several of them. This study will be published in SCIENCE in the near future.

R. M. McMULLEN

Canadian Committee on Oceanography: Oceanographic Symposium, April 17 -
21, 1967

This year the Canadian Committee on Oceanography, an advisory and coordinating body consisting of representatives from several governmental agencies and universities, scheduled a scientific seminar at Dalhousie University, Halifax. Although subject matter included biology, physics, acoustics, ice, meteorology, tides, waves and ocean circulation only the papers more pertinent to geologists and geophysicists are listed here.

- C. R. MANN: Some remarks on studies of circulation of the North Atlantic conducted at the Bedford Institute of Oceanography.
- G. A. BARTLETT: Planktonic Foraminifera and climatic change.
- J. I. MARLOWE and G. A. BARTLETT: Oligocene-Miocene strata in a submarine canyon off Nova Scotia.
- J. BROOKE and R. GILBERT: The Bedford Institute of Oceanography rock core drill.
- A. S. BENNETT and B. D. LONCAREVIC: Digital data logging systems.
- D. L. BARRETT and K. S. MANCHESTER: Crustal structure in Baffin Bay and Davis Strait from magnetometer surveys.
- R. V. COOPER, G. N. EWING and B. D. LONCAREVIC: Shipborne gravimeter and magnetometer measurements on the tail of the Great Bank of Newfoundland.
- M. J. KEEN: Geophysical studies on the Eastern Seaboard of Nova Scotia.

As no collective publication of papers are anticipated, enquiries should be directed to the authors. Except for M. J. Keen of the Institute of Oceanography, Dalhousie University, all authors listed are on the staff of the Bedford Institute of Oceanography.

B. R. PELLETIER