

## ANCIENT SEDIMENT STUDIES

MARSHALL KAY of COLUMBIA UNIVERSITY reports that his interest in northeastern Newfoundland continues. Dr. Kay has been studying the stratigraphy and structure of the Notre Dame Bay region for the past several years. This study is directed toward a better understanding of continental drift. These studies are being integrated with oceanic findings currently made by the department. The region of New World Island has been subjected to intensive examination by Dr. Kay and his students. Work on this area is now virtually complete. EDWARD S. BELT of VILLANOVA UNIVERSITY, JOHN F. DEWEY of CAMBRIDGE UNIVERSITY, England, and GREGORY W. WEBB of the UNIVERSITY OF MASSACHUSETTS have been working with Dr. Kay in the area. JAMES HELWIG, an N.S.F. fellow, will continue during 1965 his study of the stratigraphy and structure of the New Bay area west of the Bay of Exploits, northeastern Newfoundland. WILLIAM JORDAN of the UNIVERSITY OF WISCONSIN has not yet completed his work on the stratigraphy and sedimentary petrology of Bell Island. Dr. Kay is preparing for publication his work in Newfoundland. Some references to this are found in Stratigraphy and Life History (1965, John Wiley & Sons, Inc.) which he co-authors with Dr. E. H. COLBERT, also of Columbia University.

W. S. MCKERROW of the CALIFORNIA INSTITUTE OF TECHNOLOGY is continuing his work on the stratigraphy and structure of the Arisaig area, Antigonish County, Nova Scotia. A. J. BOUCOT of California Institute of Technology is also currently engaged in deciphering the structure and stratigraphy of Silurian and Lower Devonian rocks in the Arisaig area, in the Cobequid Mountains, and in the Annapolis Valley. Dr. Boucot is also interested in Silurian and Devonian brachiopods. The Arisaig area continues to be scrutinized by geologists with diverse interests: JOHN F. DEWEY, CAMBRIDGE UNIVERSITY, England, is examining pre-Silurian volcanics in the area; C. F. HICKOX, Jr., of COLBY COLLEGE, Maine, is studying the stratigraphy and sedimentation of the Arisaig Group; RICHARD K. BAMBACH is working on a dissertation on the pelecypods of the group; and WILLIAM F. FYSON, UNIVERSITY OF OTTAWA, is unravelling some of the complex structure of the Arisaig area. We are planning on a more detailed report on this region which has been "pounded upon" intensively during the past several years by a group of international geologists.

D. J. C. LAMING of the UNIVERSITY OF NEW BRUNSWICK reports on the great activity in sedimentary rock study from Fredericton. Dr. Laming is currently concerned with the sedimentology, stratigraphy, paleogeography, and paleoclimatology of the Carboniferous rocks of southeastern New Brunswick and northern Nova Scotia. He has suspended work on the occurrence and deposition of metallic sulphide minerals in Carboniferous sedimentary rocks of northern Nova Scotia.

M.Sc. theses in stratigraphy and sedimentation nearing completion or completed at the UNIVERSITY OF NEW BRUNSWICK are:

BARTLETT, D., 1965, Origin and mineralogy of the colouration of some New Brunswick red beds.

- BROWN, A. A., 1950, The southern margin of the Springhill coal seam.
- CUMMING, L. M., 1951, A heavy mineral study of the Pennsylvanian sedimentary rocks of the Minto-Chapman district, New Brunswick.
- FRASER, D. C., 1960, The Tantramar copper swamp.
- HAMILTON, J. B., 1962, Correlation of the Pennsylvanian rocks in the western part of the Central Pennsylvanian basin of New Brunswick by means of fossil spores.
- LAWSON, D. E., 1962, Sedimentology of the Bass Point Formation in Southeastern New Brunswick.
- LEAVITT, G. M., 1963, Geology of the Precambrian Greenhead Group in the Saint John area, New Brunswick.
- McILWAINE, W. H., 1965, Origin and age of the Perry Formation (Upper Devonian), Charlotte County, New Brunswick.
- MAGNUSSON, D. M., 1955, The Triassic sedimentary rocks of St. Martin's, New Brunswick.
- van de POLL, H. W., 19    , Carboniferous volcanic and sedimentary rocks of the Lower Slim Creek area, Sunbury County, New Brunswick.
- SUND, J. O., 1958, Origin of New Brunswick gypsum deposits.

Quicksand injection structures in red beds of New Brunswick are currently being studied by W. H. McILWAINE, J. E. ROWLING, and Dr. LAMING.

D.J.C. LAMING and D. E. LAWSON gave a joint paper at the joint AAPG-SEPM convention in Toronto last spring. The paper is entitled Paleocurrents and sedimentary facies in the Bass Point Formation, southern New Brunswick and northern Nova Scotia. The abstract is in Bulletin 47 of the society.

W. B. SKIDMORE of the GEOLOGICAL EXPLORATION SERVICE of the MINISTERE DES RICHESSES NATURELLES DU QUEBEC reports on his stratigraphic work. The long-range plan is a new compilation map of the Gaspé Peninsula. At the moment the specific problem is the stratigraphy and structure of Cambrian and Ordovician rocks (the old Matapedia Group) located in the southern part of the peninsula. Traditional field mapping is being done but special attention is given to fossil collecting. The specimens are distributed for study amongst half a dozen paleontologists in Montreal, Ottawa and the United Kingdom. On completion of the current project, a similar study may be made on the Lower Devonian Fortin Group.

In co-operation with the GEOLOGICAL SURVEY OF CANADA, the Service has recently started a program of age determination studies of igneous and metamorphic rocks in the areas of the Shickshock and Maquereau groups (Middle Ordovician).

DR. SKIDMORE is presently joining with Messieurs BOUCOT, AYRTON, BELAND, LAJOIE, and LESPERANCE, on a forthcoming paper on the Llandovery of the Northern Appalachians.

Paleontologists are extremely active in the Atlantic Provinces! Several of the studies are highlighted below; other investigations will be dealt with in later issues of MARITIME SEDIMENTS.

H. B. WITTINGTON, HARVARD UNIVERSITY, and C. H. KINDLE, CITY COLLEGE OF NEW YORK, continue their interest in the stratigraphy and paleontology of Cambrian and Ordovician rocks of western Newfoundland. Dr. Wittington is awaiting publication in the Bulletin of the Museum of Comparative Zoology, Harvard, descriptions of trilobites from Table Head. He plans to return to western Newfoundland in the summer of 1965 to study, in particular, the Lower Ordovician and to collect more trilobites.

Published papers issuing from his and DR. KINDLE'S work are:

KINDLE, C. H., and WITTINGTON, H. B., 1958, Stratigraphy of the Cow Head Region, Western Newfoundland: Bull. Geol. Soc. America, v. 69, p. 315-342.

KINDLE, C. H., and WITTINGTON, H. B., 1959, Some stratigraphic problems of the Cow Head Area in Western Newfoundland: Trans. New York Acad. Sci., ser. 2, v. 22, p. 7-18.

WITTINGTON, H. B., 1963, Middle Ordovician trilobites from Lower Head, Western Newfoundland: Bull. Mus. Comp. Zool., v. 129, p. 1-118, 36 pl.

WITTINGTON, H. B., and KINDLE, C. H., 1963, Middle Ordovician Table Head Formation, Western Newfoundland: Bull. Geol. Soc. America, v. 74, p. 745-758.

DAVID L. DINELEY of the UNIVERSITY OF OTTAWA has spent much of the last three summers collecting fish remains from the Knoydart Formation ( Devonian ) of the Arisaig area, Nova Scotia.

A. J. BOUCOT of the CALIFORNIA INSTITUTE OF TECHNOLOGY has also examined the fauna of the Arisaig area - with special reference to Silurian and Devonian brachiopods.

LAING FERGUSON of MOUNT ALLISON UNIVERSITY is planning a study on the intriguing amphibian tracks at world-famous Joggins, Nova Scotia. Dr. Ferguson also intends to study the "mega-conglomerate" at Clarke's Head, near Parrsboro, Nova Scotia.

H. R. GREINER of the UNIVERSITY OF NEW BRUNSWICK is also interested in the fossil fish of the Maritimes. Dr. Greiner is financed for this work by a G.S.C. grant. The department also plans to instigate work on the palynology of the Maritimes.

\* Y. R. GLOBENSKY has recently completed a Ph.D. thesis entitled Upper Mississippian non-carbonate microfauna from the Windsor Group of the Atlantic Provinces. Dr. Globensky wrote his Master's thesis in 1962 on Upper Windsor conodonts from the Windsor Group of the Maritime Provinces. Both theses are available from the UNIVERSITY OF NEW BRUNSWICK.