

Current Research

Section: Géomorphologie et Quaternaire, Association canadienne-française pour l'avancement des Sciences

Cette section, qui a été créée en 1966, a tenu trois congrès à Québec, Sherbrooke et Ottawa. Trois colloques multidisciplinaires ont également été organisés par J. C. Dionne; l'un sur la cartographie géomorphologique et l'autre sur la photo-interprétation. Un symposium sur le Quaternaire du Québec, organisé par la même section et sous les auspices du Ministère des Richesses naturelles du Québec, a été tenu à Chicoutimi au début de septembre 1968.

This section was created in 1966 by ACFAS, and has held three annual meetings in Quebec, Sherbrooke and Ottawa. Many papers dealing with Quaternary of Quebec and Canada were presented at these meetings. Three multidisciplinary conferences were also organized by J. C. Dionne: one on Geomorphology in Quebec, one on Geomorphological mapping in Canada, and a third one on Photo-interpretation. The same section of ACFAS has organized also a symposium on the Quaternary of Quebec which was held at Chicoutimi, Quebec in 1968.

Voici la liste des communications présentées à la section Géomorphologie et Quaternaire de l'ACFAS:

List of papers presented at the three meetings of the section Geomorphology and Quaternary of ACFAS:

Québec - 1966:

- J.-C. DIONNE: - Modelé périglaciaire dans la région de Mont-Joli, Québec
 - Formes Littorales de corrosion et de dissolution sur la rive sud de l'estuaire du Saint-Laurent
 - Sédimentologie littorale et glacielle
- J.-C. DIONNE et C. LAVERDIERE - Formations de cailloux plats posés sur la tranche en milieu littoral
- Y. DORION-ROBITAILLE - Observations sur les phénomènes périglaciaires de l'île Akpatok
- N. R. DRUMMOND - Problèmes de géologie glaciaire de la région du lac Cambrien, Nouveau-Québec
- R. HEROUX - Géomorphologie de la région de New-Carlisle (Gaspésie):
 - Chandler, carte des dépôts superficiels
- C. LAVERDIERE - Sur le lieu de fonte sur place de la calotte glaciaire de Shefferville
- L. OTTMANN - La néo-tectonique: essais de représentation graphique
- R. RAYMOND - La carte géopédologique de la région du lac Saint-Jean: nature des roches-mères et développement morpho-génétique des profils de sols
- G. RITCHOT - Le problème de la néo-tectonique en Gaspésie
- B. ROBITAILLE - Problèmes géomorphologiques de l'île Akpatok, baie d'Ungave
- D. ST. ONGE - Les "humpies" de la région de Whitecourt, Alberta
 - La vallée de l'Athabasca, entre Windfall et Shisolm, Alberta

Sherbrooke - 1967:

- C. BERNARD, C. LAVERDIERE et J.-C. DIONNE - Les broutures glaciaires: introduction d'un terme nouveau et faible intérêt accordé à leur étude
- P. CLEMENT - Observations sur l'acidité des eaux atmosphériques en zone tempérée
- J.-C. DIONNE - Caractéristiques des schorres de l'estuaire du Saint-Laurent en aval de Québec
 - Erosion glacielle du bas estran et de la slikke, littoral du Saint-Laurent
 - Pétrographie des formations meubles grossières de la région côtière Montmagny - La Pocatière
 - Formes de cryoturbation fossiles au Lac-Saint-Jean?
- C. LAVERDIERE ET J.-C. DIONNE - Sur une nouvelle micro-forme glacielle observées à Val Jalbert, au lac Saint-Jean

- A. POULIN - Les formes de décriptitude glaciaire de la cuvette de St-Côme, Joliette
- G. RITCHOT - Entailles cycliques et massifs tectoniques des Cantons de l'Est
- Plaines et terrasses quaternaires des Cantons de l'Est

Ottawa - 1968:

- P. CLEMENT et P. GADBOIS - Note sur l'établissement de deux parcelles expérimentales d'érosion, à l'université de Sherbrooke
- J.-C. DIONNE - Observations sur les tourbières réticulées du Lac Saint-Jean
- Formes de corrosion dans l'anorthosite en milieu littoral
- J.-C. DIONNE
- M. JURDANT et J. BEAUBIEN - Moraines frontales dans le parc des Laurentides et régions avoisinantes
- R. HEROUX - Les limons lités de la Cascapédia
- C. LAVERDIERE - Observations nouvelles sur les striures, les broutures et les troncutures glaciaires
- G. LENGELLE - Bourrelets de congère de Luskville, Québec
- A. POULIN - Les dépressions de fusion glaciaire et la réorganisation du réseau hydrographique
- La notion de compartiment de décriptitude glaciaire dans les plates-formes
- D. ST. ONGE - Hydromorphologie de la rivière Freeman, Alberta
- La stratigraphie de la région de Fort Assiniboine, Alberta

Note: Les résumés de ces communications apparaissent dans les Annales de l'ACFA.
Abstract of these papers are published in the Annales de l'ACFAS (Montréal)

Concerning my research work on the Quaternary:

1 - Mapping of surficial deposits and geomorphology of the Lake Saint-Jean/Saguenay areas, including some parts of the Laurentides Park and vicinity; work made as a forest lake inventory program of the Department of Forestry and Rural Development.

2 - Pleistocene and coastal geomorphology of the South Shore of the St. Lawrence Estuary, from Quebec to Gaspé, but especially from Le Portage to Bic.

Concerning work by Dr. Robert Héroux:

Dr. R. Héroux, Quebec Department of Lands and Forests, is working on different projects involving the mapping of surficial deposits in Quebec, and is completing a D.Sc. thesis dealing with the Geomorphology of the South Coast of Gaspé Peninsula.

J.-C. DIONNE

Province of Québec, Department of Natural Resources

One project actually underway, as follows: Stratigraphy and paleogeography of the Gaspé Limestone - Gaspé Sandstone transition in eastern Gaspé Peninsula. G. David Mason, graduate student, Carleton University. Commenced in 1967; expected completion mid-season 1969. Study supported by a small amount of shallow diamond-drilling.

Two other projects are planned to start in 1969.

1. Detailed study of Silurian reef and associated rocks, La Rédemption area. Yvon Héroux, graduate student, Université de Montréal. Study to be supported by shallow diamond-drilling.
2. Stratigraphy of Upper Ordovician to Lower Devonian rocks on the St. Jean River anticline, Gaspé Peninsula. Pierre-André Bourque, graduate student, Université de Montréal.

W. B. SKIDMORE

McGill University, Department of Geological Sciences, Montreal, Quebec.

One Master's Thesis is presently being finished. This is by Ralph Gilmore on the Petrography of the various carbonate formations in the Philipsburg thrust sheet, SE Quebec. A number of students are working down in the Caribbean, and are dealing with clastic carbonate sediments. One of these, Bill Clack, is expecting to finish his Ph. D. Thesis by September this year, and has come up with some interesting results on sediment transport of carbonate grains and statistical parameters concerning carbonate particles. This work was done in a back reef area on the east coast of Carriacou. Also expected to finish this year is an M. Sc. Thesis by George B. Pendlebury concerning Patch reef sedimentation on the east coast of Carriacou. Noel James is starting a new Ph. D. project which will likely involve the facies paleoecology and in part diagenesis of the first reef ridge or youngest reef terrace on the west coast of Barbados.

E. W. MOUNTJOY

University of Pennsylvania Advance Science Seminar, Bay of Fundy, 1968.

This seminar, which was reported in the last issue of MARITIME SEDIMENTS, was funded through a grant awarded by the National Science Foundation (GZ-1032). Regrettably this note was not included in our previous account. However the program was conducted at a very fine level and we are delighted at having the opportunity to refer to it again even under a note of remissness. Our congratulations to the organizers and participants.

B. R. PELLETIER

The Earth Sciences in Canada, A Centennial Appraisal and Forecast, Edited by E. R. W. Neale, The Royal Society of Canada Special Publications, No. 11.

In June, 1967, the Earth Science Division of the Royal Society of Canada held a symposium to assess the country's activities and accomplishments in the earth sciences and to provide some guidelines and predictions for the future. The papers given at the symposium and collected in this volume are devoted chiefly to the topics of university teaching, basic research, and applied science. The authors, all eminent figures in the field of Canadian earth sciences and mineral industry, trace the trends of the past few years, indicate how and why they developed, and analyse the problems encountered.

An introductory paper by three senior scientific policy makers describes the organization of the earth sciences in Canada today. Included here are the recommendations for an amalgamation of all the sciences dealing with the solid earth and a freer interchange of scientists between government, industrial, and university laboratories. This essay also points out that universities have a great deal of influence and industry comparatively little upon the expenditure of large sums of government money in support of the earth sciences.

Following this, twelve papers review developments in most of the major subdisciplines: petrology, stratigraphy, palaeontology, geochronology, hydrogeology, geochemistry, and geophysics, together with their application to engineering projects and the search for petroleum, metallic mineral deposits, and ground water. Although a certain amount of planned overlap brings out different opinions on specific points, there is concurrence on major matters which includes the almost unanimous agreement that the earth sciences in Canada are passing through a critical period of transition as the reconnaissance phase draws to a close and an emphasis on quantification develops.