



# Something new at MPE!

## General Assembly

**Sunday November 22<sup>nd</sup>, 2009, at 7:00 PM**

Laboratory for Conservation and Research - MPE  
located at 541, rue de la Congrégation in Montréal

The annual general assembly of members of the Museum will be held Sunday, November 22<sup>nd</sup>, 2009 at 7:00 PM in the Laboratory for Conservation and Research - MPE located at 541, rue de la Congrégation in Montréal.

The Museum of Paleontology and Evolution would like to thank you for your unflagging moral and financial support by inviting you, before the general meeting, to a visit of the Laboratory for Conservation and Research - MPE. You will have the chance to see the progress of the laboratory's extension, and also of the cataloguing and conservation of the MPE collections. Refreshments will be served during the reception.

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## Strategic Planning

On Monday, October 26, 2009, Messrs. Jean-Paul Desjardins and Martin Forget of the consulting firm Desjardins Strategic Marketing Inc. presented the final report for strategic planning. This study, initiated in the spring of 2009, was aimed at identifying the Museum's strengths and weaknesses, as well as the opportunities, threats and challenges (SWOT analysis) to the implementation of the MPE in the Sud-Ouest borough of the city of Montreal.

Having established a picture of the achievements and qualified the results, people at Desjardins Marketing suggested strategic directions for the MPE (vision, mission, values, museum experience, size of the future museum).

The report evaluated potential customers, both qualitatively and quantitatively, assessed the different layout options for the future premises of the MPE, and made its recommendations.

The report also set out a development vision, and identifies some opportunities for the development of the MPE in the borough. To achieve this, a five-year action plan (funding, partnerships, site selection, exposition content, etc.) was presented to the Board of Directors.

We wish to thank the team at Desjardins Marketing for their work and hope to continue the development of the museum with them in the near future!



## 2009 fundraising campaign "A quickly evolving museum"

Since the launch of the 2009 fundraising campaign "A quickly evolving museum" last spring, we received \$6,114.00 in donations from members and friends (non-members) of MPE! Throughout the campaign, we keep you informed of the increase in accumulated monies using a thermometer that shows the sums received. This thermometer is integrated into a geological time scale.

As the total increases, one sees the colors belonging to different geological periods, the official colors used by the Geological Society of America.

We have so far received 30 donations totaling \$6,114.00. This includes two major gifts. The first, amounting to **\$2,000**, was presented on behalf of **Madame Nathalie Normandeau, Deputy Premier and Minister of Natural Resources and Wildlife**. This donation was obtained through the intervention of our Member of the National Assembly, Mrs. Marguerite Blais, of the Saint-Henri-Sainte-Anne constituency.

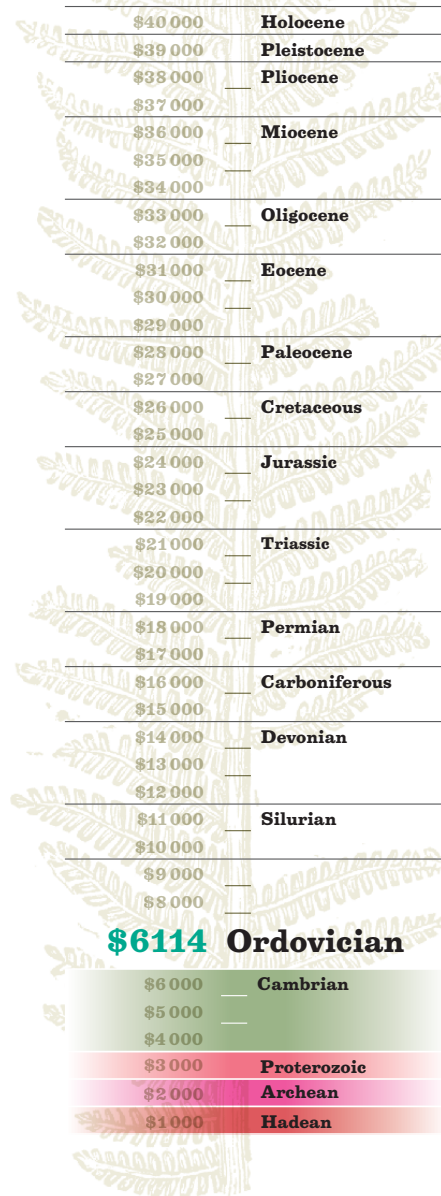
The other major donation comes from **Mr. François (Frank) Habets**, a collector from the Ottawa area, who has given **\$8,000!** An initial payment of \$2,000 was recorded in the present thermometer, and the other three installments will be added in the coming months, the last being scheduled for 1 March 2010.

Furthermore, we warmly thank the following donors for their contribution to the campaign:

Louis Germain and Sophie Germain, Pauline Beaudet, Daniel Lapointe, Dr. Ginette St-Roch of the Centre dentaire St-Roch, Réal Daoust, Mélanie Letendre and Patrick Thibault, Christian Thériault, Pierre Cournoyer, Stéphane Perron, Normand Pineault, Pierre Brunel of the Institut québécois de la biodiversité, Nathalie Daoust, Jacques Letendre, Ginette Cournoyer, Daniel Zuckerman of Peinture Cité, Elsa Mustière and Christophe Hellman, Chantal Claude, Mario Cournoyer, Luc Pelland, Jean-Yves Pinal, Jean-Yves Landry, Martine Lapointe, Nathalie Dupont, Jean-Christophe Boitard and Snejinka Koen.

# The evolution of a museum

## 2009 Fundraising Campaign of the Museum of Paleontology and Evolution



The latest thermometer emailed to members and friends of the MPE. At the bottom, we find the total amount accumulated since the start of the campaign. You can see that we have already reached one third of our goal of \$ 40 000.



# Canadian Paleontology Conference 2009 in Sudbury

Messrs. Jean-Pierre Guilbault and Mario Cournoyer took part in the 19th Conference of the Paleontological Division of the Geological Association of Canada held in Sudbury, Ontario from September 10 to 13, 2009. This was an opportunity to reconnect with some members of the Canadian paleontological community, something that had not occurred since the fall of 2006 at a conference organized jointly by the MPE and the Redpath Museum in Montréal.

At the conference, a technical poster was presented by Messrs. David M. Rohr, a researcher at the Department Earth and Physical Sciences at Sul Ross University in Alpine, Texas, and Mario Cournoyer of MPE.

The purpose of this poster, reproduced below, is the discovery of two large fragments of fossil gastropods found in August 2000 in Manitoba by Nathalie Daoust and Mario Cournoyer. Currently under study, these fragments belong to the species *Maclurina manitobensis*, and one of them would be the largest individual known to date, since its extrapolated diameter seems to reach nearly 40 cm!

In fact, it would be even be the largest Paleozoic gastropod (that is, the period from the Cambrian to the Permian) in the world!

## IN SEARCH OF THE LARGEST PALEOZOIC GASTROPOD

COURNOYER, Mario, Musée de Paléontologie et de l'Évolution, Montréal, Québec Canada H3K 2J1; and David M. ROHR, Department of Earth and Physical Sciences, Sul Ross State University, Alpine, TX USA.

### INTRODUCTION

In their Canadian Paleontology Conference - Field Trip Guidebook, Young et al. (2009) wrote about *Maclurina manitobensis*: "The largest known specimen of *M. manitobensis*, from the Bighorn Dolomite of Wyoming, is about 26 cm across (Rohr and Bloodgett, 1992). The largest known specimens from Garson (quarries) are more than 20 cm across, so it is possible that a "world record" example will be found at this site." Unbeknownst to Young et al., two specimens were found by the senior author in the summer of 2000 and these could become the "world record(s)" sought after.

The specimens of this study were collected in the spoil dumps of the Gillis Quarry in Garson, Manitoba, on August 17th 2000 by Nathalie Daoust and Mario Cournoyer on vacation in western Canada. Their goal was to collect a sample of the fossil fauna of the Tyndal Stone for the Musée de Paléontologie et de l'Évolution located in Montréal, Québec whose specimen numbers are used here. The age of the "Tyndal Stone" (Sekirk Member of the Red River Formation) is Late Ordovician (Maysvillian to Richmondian), slightly older than the Churchill sequence (Late Richmondian) in central Manitoba (Williams Member).



The Gillis Quarry in Garson, Manitoba



*Maclurina manitobensis* occurs in the Sekirk Member of the Red River Formation (Maysvillian to Richmondian). From Young and others, 2008.

### LATE ORDOVICIAN GASTROPOD GENUS *MACLURINA*

*Maclurina* is common in the Upper Ordovician units of North America. Wilson (1975) noted the lithologic similarity of the Lithosoma from Sonora, Mexico, to Hudson Bay, where it is almost everywhere mottled with large dolomitized boulders. The characteristic fauna of mollusks, corals, and *Rospectaculites* is also widespread.



Shown below is the familiar fauna and lithology present in the Montoya Group, El Paso, Texas.



*Maclurina* and a nautiloid cephalopod in the mottled Upham Formation of the Montoya Group, Franklin Mountains, El Paso, Texas.

*Maclurina manitobensis* has been given several names over the years since it was first discovered by Whiteaves. Whiteaves (1890) assigned the species to *Maclurea* which is an invalid, but widely used name for *Maclurina*. Ulrich and Scofield (1937) placed the species in their new genus, *Maclurina*. Knight et al. placed *Maclurina* in synonymy with *Maclurea* LeSueur, 1818. Most recently Rohr and Bloodgett (1992) reestablished *Maclurina* as a separate genus based on its spiral ornamentation and narrow umbilicus.



D. Rohr (right) and R. B. Bloodgett display the 25 cm *Maclurina* specimen from the Bighorn Dolomite of Wyoming (USGS photo).

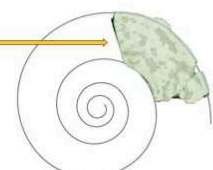


Large block (below) at the Gillis Quarry in Garson, Manitoba. Red arrow indicates where uncoiling of whorls begins. Shown above is an internal mold of the same whorl fragment (specimen MPEP199.2) after it was separated from the larger block.

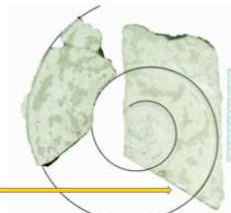


Slab with an embedded whorl fragment. It is the inner whorl of the shell 23 cm in diameter (specimen MPEP109.1), and it is cut parallel to, and near the base as indicated by the lack of an umbilicus (scale in cm).

One estimate of the original diameter of the shell was made below by producing a spiral with the same rate of coiling (an increase in width of 15 lines per whorl) as the holotype of *Maclurina manitobensis* illustrated by Knight (1941, pl. 65.3). By fitting the whorl fragment (specimen MPEP109.2) to the spiral, an estimate of 39.3 cm was produced.



A second estimate of the coiling (below) was to produce a spiral with the same rate of coiling as the inferior fragment from the Gillis Quarry (specimen MPEP109.1). Only half of the outer fragment is shown, because the youngest part of the whorl appears to have a greater rate of radius expansion and is no longer in contact with the previous whorl. This produced an estimated minimum diameter of 31.9 cm.



### CONCLUSIONS

Both estimates indicate a shell considerably larger than the previous record diameter of 25.5 cm from the Big Horn Dolomite. If these estimates made from incomplete shell are accurate, the specimens of *Maclurina manitobensis* from Garson, Manitoba, are the largest known Paleozoic gastropods.

### REFERENCES

Knight, J. B. 1941. Paleozoic gastropod genotypes. Geological Society of America, Memoir 32, 510 p.  
Le Sueur, C. A. 1818. Observations on a new genus of fossil shells. Journal of the Academy of Natural Sciences of Philadelphia, 1:310-313.  
Rohr, D. M. and R. B. Bloodgett. 1992. *Maclurina manitobensis* (Whiteaves), largest Paleozoic gastropod? Journal of Paleontology, 66:890-894. Ulrich, E. O., and W. H. Scofield. 1937. The Lower Silurian Gastropods of Minnesota, p. 813-1081. In: The Geology of Minnesota, Volume 3, part 2. Paleontology. Harrison and Smith, Minneapolis.  
Wilson, J. L. 1975. Carbonate Facies in Geologic History. Springer-Verlag, New York, 471 p.  
Young, G. A., R. J. Elias, S. Worog, and E. P. Dobrzanski. 2008. Upper Ordovician Rocks and Fossils in Southern Manitoba - Canadian Paleontology Conference Field Trip Guidebook No. 13.



## Canadian Paleontology Conference 2009 à Sudbury (continued)



One of the field trip leaders, Frank Brunton (centre) of the Ontario Geological Survey, explains the stratigraphy of one of the Ordovician sites visited on Manitoulin Island.

Before the conference, a two-day trip allowed participants to visit several sites on Manitoulin Island and on the northern portion of the Bruce Peninsula of Lake Huron, Ontario. During this trip, the emphasis was placed on recent advances in the knowledge of the geological sequence covering the Upper Ordovician and Silurian of the region and its comparison with the northeastern Michigan Basin.



Participants at the conference during the award of the Billings medal to Professor Guy Narbonne of Queen's University in Kingston for his contribution, among others, to the knowledge of the Ediacaran faunas of Newfoundland.

## Inauguration of a new paleontological exhibit

The archeological complex of Pointe-du-Buisson inaugurated, on October 23<sup>rd</sup>, 2009, its new permanent exhibit on local paleontology in a new display space, the "Hall paléontologique Hans Hofmann".

The exhibition deals with Potsdam trace fossils as well as exceptional new fossils of jellyfish and arthropods. These remarkable fossils, which are preserved on huge blocks of stone weighing up to 8 tons (!), were found by Messrs. Mario Lacelle, and Pierre Groulx, two self-taught paleontologists who explored the region. The hall was named in honor of Professor Hans Hofmann of McGill University for his research on Precambrian fossils and on trace fossils.

This permanent exhibition, only the fifth to deal with paleontology in Quebec, is very important for the dissemination of this knowledge. In comparison to the more than 30 archeological exhibits, some of which are major, paleontology should have more space devoted to displaying fossils from across the province of Quebec at a single facility.



MM. Pierre Groulx (à gauche) et Mario Lacelle (à droite) qui ont effectué les découvertes dans la région de Melocheville. Michel Chartier (au centre) du MPÉ, invité au lancement.



## Hiring a consultant • a short report

Work on the extension to the museum began in late August and has been difficult. Several urgent tasks had to be performed simultaneously: the continuation of the strategic planning project, the fundraising campaign, the cataloguing of collections and of the library, etc. Some projects, such as organizing the library have been postponed while others were modified to optimize the work done by Mr. Cournoyer.

For example, cataloguing being a lengthy process that takes a few years, it has been decided to give priority to cataloguing specimens that are either rare, or of scientific importance, or that show ideal qualities for exhibits. Six hundred and thirty Ordovician fossils from the Paléovision Collection have been catalogued. As to the expansion of the laboratory, one room, currently under construction, will be used for the conservation of collections. It will house a dozen or so conservation cabinets given to us two years ago by the Canadian Museum of Nature. This extension should be largely completed by the general meeting of November 22, 2009. In the coming months we will keep you informed of the development of this project.

### Field trips – 2009 field season

Three field trips have taken place this season: on May 2<sup>nd</sup> to the Saint-Nicolas sand pits, on June 7th to the Hanson brickworks in Laprairie, and on November 1st to the Sintra quarry at Saint-Jacques-de-Montcalm. The first two drew many participants that is, 15 for Saint-Nicolas (despite the long drive from Montréal) and 30 for Laprairie. As for the Saint-Jacques-de-Montcalm excursion, it was organized at the last minute, which may explain the small number of participants (3).



**Laprairie**  
The Parent-Thibault family looking for fossils.



**St-Jacques-de-Montcalm**  
Mario Cournoyer (left) and Mario Lacelle (right) extracting cephalopods from the floor of the quarry



**St-Nicolas** Chantal Claude (left) and members of the family of Jacques Lachance (centre) contributing to the search of Quaternary fossil vertebrates

### Table des acteurs culturels du Sud-Ouest de Montréal

As part of the festivities surrounding the 25th anniversary of RESO (Regroupement Économique du Sud-Ouest), there was, last October 25, a celebration at the Théâtre Corona, on Notre Dame Street, organized by the *Table des acteurs culturels du Sud-Ouest*. As a new member of this grouping, the MPE was invited to take part in the event by putting up a promotional kiosk and this was one of the busiest booths! The *Table des acteurs culturels du Sud-Ouest* brings together key agencies involved in the renewal of the neighborhood. Among the member organizations we note the Maison St-Gabriel, the Musée des Ondes Emile Berliner, Radio Ville-Marie and the Corona Theater.



### Descriptive card of the specimen

Specimen number: MPEP3.24  
Identification: Trilobite, Asaphidae  
Genus and species: *Isotelus* sp.  
Age: Upper Ordovician  
Geolog. formation: Nicolet Formation  
Locality: Briquetterie Hanson  
Laprairie, Québec  
Finder: Mr. Jean-Claude Breton  
Date: August 1984

**This specimen preserves a nearly complete individual of the trilobite *Isotelus* sp. Mr. Jean-Claude Breton made this exceptional find in 1984. The head (cephalon), body (thorax) and tail (pygidium) can be seen. Most of the time, these parts are disjointed and isolated from each other. These shell fragments are the result of moulting, allowing the animal to change its shell as it grows. This specimen is from the Jean-Claude Breton Collection, which was the first to be incorporated into the collections of the MPE.**



## Membership card

As at the beginning of every year, we inform you that your membership card must be renewed. Please find attached to this bulletin a copy of the membership renewal form. Remember that you can also make a donation, as the Museum is a charity, duly registered with Revenue Canada, and entitled to issue receipts for income tax purposes. (Charity no. 890282445RR0001).

**Editors** --- Mario Cournoyer and Jean-Pierre Guilbault  
**Reviewer** --- Michel Chartier  
**Translation** --- Jean-Pierre Guilbault and Hans Hofmann

## Board of Directors 2008-2009

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## Our coordinates

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