



THE MINERAL VEIN

Official Newsletter of

THE MINERAL SOCIETY OF MANITOBA

FEBRUARY 2013

A SLOTH'S TALE

A packed house and a very entertaining and informative talk marked the first meeting of the Mineral Society in 2013. The long and curious route travelled by the fossil skeleton replicas of a glyptodon and the giant sloth *Megatherium Americanum* from the discovery of the original fossils to the current home of their "offspring" at the Manitoba Museum was the subject of Dr. Graham Young's talk at our January 9th meeting.



The giant sloth *Megatherium Americanum* at the Manitoba Museum.

The giant sloth in our local museum is a reproduction of one found in Argentina in 1788; smaller versions of this "giant beast" were also found in western North America. This creature was one of the

largest land mammals to roam (slowly) the earth; weighing in at about 8 tonnes, it was the size of an elephant. It was distantly related to tree sloths and went extinct at the end of the last ice age.

The sloth's nearest neighbor at the museum is a glyptodon replica made from a fossil found in the same deposits in Argentina.

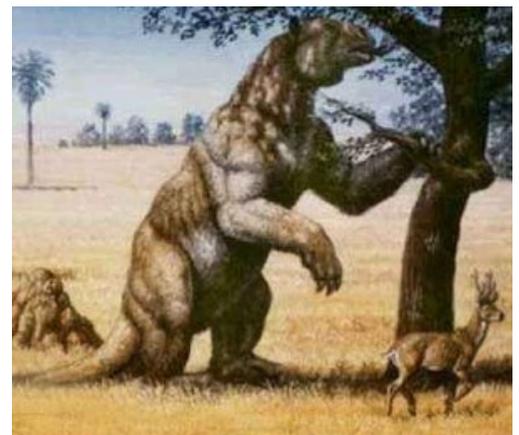


Illustration of a living *megatherium americanum*

Glyptodons resemble a giant armadillo about the size of a VW beetle but were not articulated like the armadillos and packed a wicked armoured tail for defence. They also went extinct at the end of the Pleistocene.

Megatherium was the first large, "weird" fossil find in South America and it was sent to Madrid where it was described by Georges Cuvier, the French naturalist and zoologist who almost single-handedly established the science of vertebrate paleontology and documented the extinction of species. *Megatherium* created quite a dilemma for Cuvier because he did not believe in evolution but rather "catastrophism", the sudden disappearance and appearance of new species (this was decades before Darwin's work on the evolution of species was published).

By the mid-1800's there was a huge surge in public interest in natural history and sciences and the creation of museums to reflect this. To help fill this demand, along came Henry Augustus Ward from Rochester, NY, founder of Ward's Scientific. He was a world traveler and professional scientist who not only studied and wrote about *megatherium* but made casts and moulds of it as he did from many of the great skeletons of the time.



THE MINERAL SOCIETY OF MANITOBA

C/o The Manitoba Museum
190 Rupert Avenue
Winnipeg, MB, R3B 0N2

<http://www.umanitoba.ca/geoscience/mineralsociety/index.htm>

The 2012-2013 Executive:

President

Marion Foster, *ph.* 204-775-0625

Vice President

Lisa Grabowski, *ph.* 204-774-5097

Secretary:

Ron Anthony, *ph.* 204-774-5613

Membership / Treasurer:

Brent Thomson, *ph.* 204-488-0299

Field Trip Chairman

Russ Epp, *ph.* 204-222 3063

Newsletter Editor

John Biczok, *ph.* 204-889-7976

Members at Large

Wendy Anthony, *ph.* 204-774-5613

Scott Jonatanson

Marjorie Turton, *ph.* 204-775-0625

Yvonne Searle, *ph.* 204-663 6637

School Programs

Yvonne Searle, *ph.* 204-663 6637

The Mineral Vein is published monthly from September to June.

Meetings are held on the first Wednesday of each month from September to May inclusive at the Manitoba Museum in room P47 on the Planetarium level. They begin at 7:30 PM and feature announcements, an invited speaker and a raffle. Members are encouraged to bring along any new, interesting specimens, or specimens appropriate to the speaker’s topic.

Field Trips take place from May to September to interesting sites in Manitoba plus neighbouring provinces and states.

Membership: A single membership is \$15 while a family membership is \$20. Memberships run from October to October

Table of Contents

A SLOTH’S TALE 1
UPCOMING EVENTS..... 2
HENRY AUGUSTUS WARD..... 3
WELCOME CHRIS DEDUKE 4
THE NEW MINERAL EXHIBIT 4

UPCOMING EVENTS

February 6 Meeting: Our speaker will be **Paul Kremer**, geologist with the Manitoba Geological Survey and his subject is **The Cat Lake pegmatites**. The pegmatites in this part of SE Manitoba have been the focus of some of our most successful collecting trips in recent year and Mr. Kremer has studied them in some detail first as part of his M.Sc. thesis and now as part of a government mapping project. See you at 7:30 PM at our usual spot, room P47 on the lower level of the Manitoba Museum.



Thomas Epp checking out the Irgon Mine monument at Cat Lake during an MSM field trip

HAVE YOUR SAY



The executive of the Mineral Society is looking for input from the membership on what they would like to see from the club in future. This is your chance to let them know if you would like any changes or additions to the club’s goals and activities, how the meetings and club’s business are conducted, etc. If you have any thoughts on this please let any of the executive listed in the panel on the left know.

A SLOTH'S TALE (*cont. from Page 1*)

The *megatherium* replica sold for \$250 in the mid-1800's and many can still be found in museums worldwide.

In 1882, the Redpath museum, the first museum in Canada which was actually designed and built as such, opened in Montreal. It is located on the campus of McGill University and was planned by Professor W. Dawson, an expert on coal age plants. (A new mineral, later named dawsonite in his honour, was discovered in an alkali dyke adjacent to the museum). Having a *megatherium* in the collection was considered a status symbol among museums at that time and the Redpath wasted little time in acquiring one from Ward's. By 1925 they had also acquired a glyptodon replica. By the 1960's, however, the new status symbol among natural history museums was a large, nasty looking dinosaur such as a *T. Rex* and the Redpath decided to give away *megatherium* and the glyptodon to make way for the dinosaur.

In the late '60's, the new (current) Manitoba Museum was under construction and on the lookout for new display pieces to complement those housed in the original museum at the Winnipeg Civic Auditorium. In spite of the substantial budget for the new building, there was very little money for exhibits to fill it. The prospect a free *megatherium* and glyptodon from the Redpath was too good to pass up. The Manitoba Museum had to pay only for the shipping costs and the two pieces arrived prior to 1973 when the Earth Science gallery opened, wrapped in post civil war era newspapers, presumably the original packing material used by Wards. These century old antiques arrived with a bit of minor damage, after all they are made of plaster-of-Paris.

Even though the giant sloth and glyptodon are not part of Manitoba's geological history, these two have become a part of museum history and the evolution of natural history studies over the past 150 years. They remain a popular attraction at the

Manitoba Museum and we thank Graham for sharing their "life story" with us.

HENRY AUGUSTUS WARD

The saga of the ice-age Argentinean *megatherium* and glyptodon replicas described in the previous article began with Henry Augustus Ward. There are likely few college and university students of the natural sciences in North America who have not heard of Ward's Scientific or studied their wide ranging specimens in a lab somewhere. This pioneering company was founded by an American naturalist and geologist, Henry Augustus Ward (1834–1906) from Rochester, New York. To quote the company website "*not many institutions can boast of having a founder who traveled around the world seven times, sat atop Mt. Sinai, and survived smallpox — all before the turn of the century!*"



Henry A. Ward in 1906 with the Santa Rosa Meteorite.

Ward attended Williams College and the Lawrence Scientific School at Harvard, where he was an assistant of Louis Agassiz, the renowned expert in modern and fossil fish and glaciology. (Agassiz was the first to propose scientifically that the Earth had been covered by ice sheets in the past and had himself studied under Georges Cuvier in Paris). Ward traveled extensively and studied at universities throughout Europe and North Africa and then traveled to West Africa and the West Indies where he compiled natural history collections. He returned to Rochester in 1860, and served as a professor at the University of Rochester until 1865. It was in Rochester that he founded Ward's Natural Science, a pioneer enterprise of its kind, which collected specimens from all parts of the world, and then mounted and sold them to colleges and museums. Sadly Ward was struck and killed by an automobile in Buffalo in 1906, the first

traffic fatality in that city. His ashes were interred in a granite monument at a cemetery in Rochester but later stolen. The monument is surrounded by a glacial erratic boulder Ward had collected at Georgian Bay in Ontario. *This description taken largely from Wikipedia.*

WELCOME CHRIS DEDUKE



The newest member of the Mineral Society is Chris Deduke, a PhD student in biology at the University of Manitoba. Chris grew up in Trenton,

Ontario and obtained his BAH degree in Philosophy from Queen's University in Kingston, Ontario. He then spent three years at Fleming College in Lindsay, Ontario studying Ecosystem Management before coming to Winnipeg to undertake his PhD in Biological Sciences studying three lichens of the boreal forest. He is looking at the influences of rock substrate, lichen community and algal partner on the relationship between their ability to reproduce and their production of organic compounds known as secondary metabolites.



As a child Chris used to collect fossils and rocks but never really studied the subject, it was more for his own curiosity and display. He then became reintroduced to geology through his college program and started to read more about the importance and interaction of plants with soils and used this knowledge for field work and class projects. He collected a number of rock samples for his thesis to analyse and have become motivated to learn more about rock outcrops, mineralogy and weathering, even auditing a few geology courses at the university. Chris enjoys field work and hiking and is looking forward to attending some summer 'rock hunts' if time permits. His experience is primarily with the lichens that grow on top of the rocks but he's open to learning about anything nature related.

THE NEW MINERAL EXHIBIT AT THE MANITOBA MUSEUM

Recently two members of the Mineral Society's museum committee, John Biczok and Tony Smith, had the opportunity to visit the Manitoba Museum's new mineral exhibit along with curator Graham Young and Adele Hempel, director of Research, Collections & Exhibits. As many of you know, acquiring museum size and quality mineral specimens for this planned exhibit has been a goal of the Mineral Society for the past several years. The MSM has donated a 1,000 lb amethyst, a magnificent millerite specimen from the Thompson nickel mines and a large crystalline native copper piece from Michigan. These donations provided a good deal of the impetus to get this exhibit constructed. Graham and Adele expressed their sincere gratitude to the MSM for our contributions.



Checking out the mineral exhibit at the Manitoba Museum. From L to R, members of the MSM's museum committee John Biczok and Tony Smith, with Dr. Graham Young and Adele Hempel.



A close-up view of the new mineral exhibit that is attracting a lot of attention of museum visitors.