

The Mineral Society of Manitoba c/o The Manitoba Museum 190 Rupert Avenue Winnipeg, MB R3B 0N2 Published monthly from September to June Home page: http://www.umanitoba.ca/geoscience/ mineralsociety/index.htm

2005 – 06 EXECUTIVE

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THE MINERAL VEIN

THE MINERAL SOCIETY OF MANITOBA NEWSLETTER

November 2007

December 9, 2007 Christmas Party

Sunday, 3pm

Where: Army, Navy and Air Force Veterans in Canada, 300-1395 Ellice Ave.

The entrance to the Legion is off of Empress Street, next to the Mines Branch Office. Lots of free parking is available

If you haven't signed up for the Christmas Party and plan to attend, please phone Jack Bauer at 632 6934.

Our Turkey Dinner will be similar to last year. We will be feasting on a sit down turkey dinner with all the fixings. For \$ 15.00 per person we get turkey, stuffing, mashed (real) potatoes, salad, cranberry sauce desert, tax, and gratuity. Dinner will be served in the lounge, at 4.30 PM this year.

*Note - If any members are bringing children under the age of 18, please advise, that we can arrange to have the VLT's covered. There will be a lot of parking available.

This is a night to socialize. Our auction will occur after desert and features our ever popular auctioneer Tony Smith. There are always interesting mineral and fossil specimens. Some have been provided by the Mineral Society of Manitoba's collection. Other items are donated by members. Donations are always welcome for this auction. There will be some other items such as books and fine wines!!

Contact Jack Bauer at 632 6934 to make reservations before Dec 2.



Dues are \$15/year (\$20 for families) and are payable at the October meeting or by mail during October.

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 draw. 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, neighboring provinces and states



GIFT APPRECIATION

A little while ago the Mineral Society of Manitoba gave a donation to the University of Manitoba. This donation from the Mineral Society of Manitoba allowed the Dept of Geological Sciences at the University of Manitoba to purchase two Nikon petrographic microscopes for the

undergraduate Microscopy Laboratory last spring. Here is a photograph of the two microscopes in use during one of the labs.

The students in the photo are Paul Malegus (left) and Jeff Read (right) who are 3rd year Geology students.



Nancy Chow, Professor and Head Dept. of Geological Sciences, University of Manitoba thanks the Mineral Society again for our support of the undergraduate students. This is forwarded to the members of the Mineral Society and the Executive.

CLUB MEETINGS

January 2, 2008, Speaker Dr Anton Chakhmouradian, topic to be determined but probably something to do with Kimberlite Pipes.

February 6, 2008, Speaker Dr Alan Bailes, topic to be determined

March 5, 2008, Speaker Sharon Hull, topic: turquoise-sourcing techniques

April 2, 2008, Speaker Dr Graham Young, topic: fossil record of jellyfish: does it exist in Manitoba.

May 7, 2008, Speaker and topic to be determined

Last season, we had many excellent speakers. The Vice President is accumulating an interesting collection of speakers for this season.

BRACHIOPOD COLLECTING

October 15 saw Marion Foster, Marjorie Turton, Yvonne and Bill Searle went to Stony Mountain to collect brachiopods for the Mineral Society's glue cards. One week later, Chris Lammers joined Bill and Yvonne for collecting. The glue cards are a source of funds for the Mineral Society. Here are some pictures of the dedicated supporters of our organization



Yvonne is not praying, just getting close to her collecting.



Marion said the finding was better on the far side



Bill decided to search on the opposite shore as well.

MANITOBA MINING & MINERALS CONVENTION November 15 –17 this year.

The Mineral Society of Manitoba again participated in the Student Activity Corner. The volunteers this year were. Marion Foster. Chris Lammers, Marjorie Turton, Bill and Evelyn Grieve, Bill and Yvonne Searle. Manitoba Science, Technology, Energy and Mines was generous, as in the past, with, souvenir bags, parking, literature and a lunchon.

We catered to 162 grade 4 students. The children thoroughly enjoyed the gold panning, an introduction to prospecting and mining in Manitoba, the gold display, the ore extraction process, and getting their own samples of minerals or fossils. The fluorescent minerals under black light resulted in a "wow" moment to these children.

Here are some pictures taken at the convention:



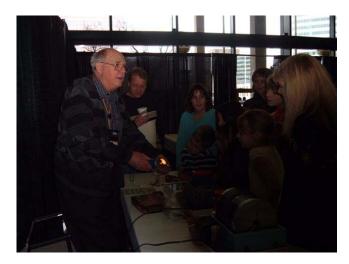
STEM fed us



Getting the glue cards ready. Evelyn Grieve, Marion Foster, Yvonne Searle, Bill Searle, Chris Lammers



Children introduced to mining and exploration



Some rocks let light pass through them. George Green showing how to make jewelry from rocks



Mineral and fossil samples here! Children line up to get samples and glue cards



Almost ready to glue. Supervised by Bill Searle



Panning for gold with an expert



The Gold display

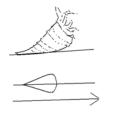
Last meeting, November 7, 2007 we had the pleasure of Dr. Bob Elias, Department of Geological Sciences, U of M, presentation on "How do some horn corals have unusual shapes?"

The following is my interpretation of his presentation. This is proof that I did not fall asleep in the darkened room during his presentation.

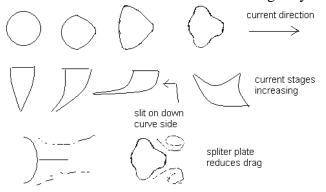
The horn corals are an extinct order of solitary coral that were abundant in Middle Ordovician. The last of them disappeared in the late Permian (mass extinction 240 million years ago). Here we are concerned with the Red River-Stony Mountain Providence and the horn corals found there.

"Horn Corals" are also known as "rugose corals" because of their wrinkled appearance. Rugose corals generally added a layer of growth (a new wrinkle) each day. Therefore it was possible to determine their age when they died. They are referred to as "horn corals" because of the unique horn shape chamber with a wrinkled, or rugose, wall. They range in size from a few millimeters to 14 centimeters in diameter and a height up to one meter. They have a skeleton made of calcite that is often fossilized. Most importantly, they lived on the sea floor.

They started out fasten to some solid object, grew, became separated from their anchor and relied on sediment to support it. There they sat



with their narrow end into the current. But when tipped over or laid on its side, they died because of lack of food and removal of waste. Stabilization to current and sediment would benefit its longevity.



Horn coral experienced drag in water current and could be easily dislodged. The triangular shape minimizing drag in high-energy environments. Weight of the coral also influences stability. The heavier, the more it sank into the sediment. Interior of horn coral can be solid or thin septum. Stony Mountain horn corals are solid inside whereas those in Garson have a visible septum. The open septum structure helps to hold the polyps secure and therefore the polyps could be more active. Widening the top produces a snowshoe effect. This prevents the horn coral from sinking too deep. Flow is diverted down current side. The horn coral is tilted in direction of current flow (down current), bearing food (zooplankton, bacteria, organics, particulates, and sediment).

Shape is affected by attempts to remain stable in energized environment and by source of food.

The triangulation fist appeared in Ordovician period and only in the Red River - Stony Mountain province. After the mass extinction 240 million years ago, the shape never appeared again.

The horn corals adapted themselves to the various environmental conditions in which they existed. Horn corals exhibited different shape adaptations to similar environmental conditions. Or did they?

The Lobocorallium Trilobatum here at Stony Mountain is unique on the earth and in history





Horn coral fossil specimens brought in by Ken and Donna Fumerton.