



THE MINERAL VEIN

Official Newsletter of

THE MINERAL SOCIETY OF MANITOBA

May 2015

MAY PRESENTATION SUMMARY

By Jacques Bourgeois

This month, I had the privilege to present one of my hobby to the members. Geocaching. Geocaching is an outdoor recreational activity, in which participants use a Global Positioning System (GPS) receiver or mobile device and other navigational techniques to find containers, called "geocaches", hidden anywhere in the world. In other words, it's a high-tech scavenger hunt.

A typical cache is a small waterproof container containing a logbook (with a pen or pencil). The geocacher enters the date they found it and signs it with their name. After signing the log, the cache must be placed back exactly where the person found it. Larger containers such as plastic storage containers or ammunition boxes can also contain items for trading, usually toys or trinkets of little value. Some geocachers have used a lot of creativity in creating different containers that can be hidden in plain sight. I mentioned for example some caches can be disguised as a fake branch on a tree, a fake bolt on a stop sign, a fake light switch plate and even a fake crosswalk button.



Geocaching started in May of 2000. This is when the US government decided to remove selective availability for GPS. Selective availability was the scrambling system that prevented civilian to use GPS technology with accuracy of less than 100m. Following the removal of selective availability, twenty-four satellites around the globe processed their new orders, and instantly the accuracy of GPS technology improved tenfold. Tens of thousands of GPS receivers around the world had an instant upgrade. Accuracy went from 100 meters to 2 or 3 meters.

For GPS enthusiasts, this was definitely a cause for celebration. Internet newsgroups suddenly teemed with ideas about how the technology could be used.

On May 3, one such enthusiast, Dave Ulmer, a computer consultant, wanted to test the accuracy. He had a simple idea Hide a container out in the woods and note the coordinates with a GPS unit then post them online or other people to find it.

Within three days, a few people read about his idea on the Internet, used their own GPS receivers to find the container, and shared their experiences online. Throughout the next week, others, excited by the prospect of hiding and finding those boxes, began hiding their own containers and posting coordinates. Like many new and innovative ideas on the Internet, the concept spread quickly and today we can find in excess of 2.6 millions containers hidden in just about every country in the world.

(Continued on page 3)

THE MINERAL SOCIETY OF MANITOBA

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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 or 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

APRIL PRESENTATION SUMMARY.....	1
UPCOMING EVENTS.....	2
FIELD TRIP ITINERARIES.....	4

UPCOMING EVENTS

June 7th, 2015: MSM Annual BBQ

This year, the BBQ will be at your president' house in St.Boniface. It will begin at 3:00 p.m. at 146 Masson Street. Hot dogs and hamburgers will be provided by the club but feel free to bring a side dish, salad or dessert to share. Bring your own lawn chair. RSVP by phone or via email:

Phone (204) 885-5618 Email: j_bourgeois@yahoo.com



September 2, 2015: MSM regular monthly meeting begins at 7:30 p.m. at the Manitoba Museum.



Founded in 1971, the Mineral Society of Manitoba is dedicated to promoting the study of minerals, rocks and fossils for their scientific and recreational value.

The Mineral Society of Manitoba hosts monthly meetings covering a variety of mineral related topics. In addition, the Mineral Society organizes summer field trips to collecting localities, and hosts educational exhibits about minerals and fossils.

MAY PRESENTATION SUMMARY (cont)

There are many different types of geocaches. The most common ones are the **Traditional**. This is the original type of geocache and the most straightforward. These geocaches will be a container at the given coordinates. The size may vary, but at minimum, all of these geocaches will have a logbook. A **Multi** cache involve two or more locations, with the final location being a physical container with a logbook inside. There are many variations, but typically once you're at the first stage, you will receive a clue to the whereabouts of the second stage. The second stage will have a clue for the third, and so on. A **Mystery** or **Puzzle** cache is a type of geocache that may involve complicated puzzles that you will first need to solve to determine the correct coordinates. An **Event** Cache is a gathering of local geocachers. The Event Cache page specifies a time for the event and provides coordinates to its location. It could be a clean up activity in a park, an evening at a local pub, a breakfast meet up, or any activity attended by many people. (Shameless plug: Oak Hammock Marsh is hosting one on May 24 called Cache the Marsh).



Family cleaning a park at a geocaching event

By far, my favourite type of geocaches, and the ones that may be the most interesting to this organization are called the **EarthCaches**. An EarthCache is a special geological location people can visit to learn about a unique feature of the Earth. EarthCache pages include a set of educational notes along with coordinates. Visitors to EarthCaches can see how our planet has been shaped by geological processes, how we manage its resources and how scientists gather evidence. Typically, to log an EarthCache, you have to provide answers to questions by observing the geological location.



Petrified tree stump in Valley of Fire, Nevada

These EarthCaches were developed by the Geological Society of America, a society established in 1888 to connect and support earth scientists at all levels of expertise and from all sectors: academic, government, business, and industry. They saw an opportunity in creating EarthCaches as a fun way to increase awareness in Earth Science.

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MAY PRESENTATION SUMMARY (cont)

One example of a great EarthCache in Winnipeg is one called "Manitoba Tyndall Stone". It is located in downtown Winnipeg. In order to claim a find, the participants must match the fossil name, with the correct photo and the coordinates where that fossil was found. The coordinates are given and the players must visit each locations to find the fossils on the exterior of buildings such as the St. Boniface cathedral, Union Station, and so on. Once they found the correct fossils and names, they can submit their answers to the cache owner who will approve or decline the find.



Manitoba Tyndall Stone EarthCache

There are several other EarthCaches in Manitoba and quite a few around the world. Each of them highlights a specific geological process or history of our planet in a fun and educational way.

This activity has taken me all over the world and is a very fun and educational way to explore an area. If you have any questions or would like to know more about geocaching and EarthCaching, do not hesitate to ask me or inquire with the Manitoba Geocaching Association.



Jacques (OHMIC) at Sheepeater Cliff in Wyoming

FIELD TRIP ITINERARY 2015

By Jack Bauer & Marion Foster

1. Thunder Bay, June 12 to 14.

We will collect **amethyst** and will explore some geological features of the area if the weather does not support good amethyst collecting. An evening BBQ is planned for Saturday, the 13th, weather permitting. Please register if you intend to go, with current contact info.

Confirmation deadline for this trip is June 7.

Contact: Jack Bauer, 204-632-6934 or

jebauer@mymts.net

2. Gillis Quarry, (June)

We will be looking for **Ordovician fossils** such as sunflower corals, brachiopods, gastropods, cephalopods and the elusive trilobites. Fossils of snails and nautiloids can sometimes reach giant proportions.

Contact: Marion Foster, 204-775-0625

3. Bird Lake / Tulabi Lake area, July 10/11.

Our objective is to collect **garnets** from outcrops, East of Tulabi and West of Booster Lake. A pre trip to the area will confirm accessibility. Campsites are subject to availability. Please register if you intend to go, with current contact info. Confirmation deadline for this trip is July 5.

Contact: Jack Bauer, 204-632-6934 or

jebauer@mymts.net

4. Lake Manitoba Narrows, (Mid August)

Paleo Excursion.

Contact: Marion Foster, 204-775-0625

5. Holland, MB. (September or October)

This trip to collect pyrite nodules. is tentative and subject to low water levels for a successful trip. This will likely take place in the fall.

Contact, Jack Bauer for details.

All field trips are subject to the weather cooperating. Some field trips may require participants to sign a liability waiver as a condition to gaining access.

Field trips are also subject to sufficient participation (and may be cancelled), so keep in touch prior to an upcoming trip. Advise trip leader of any unexpected changes.

Good Luck, and have a good summer.