

Geological Society of Minnesota
Board Meeting Minutes for May 10, 2018

- I. Notes and opening comments.
 - A. Board members present: Dave Kelso, Deborah Naffziger (via phone), Dave Wilhelm, Dick Bottenberg (via phone), Kate Clover, Dan Japuntich, John Jensen, Theresa Tweet.
 - B. Other GSM members present: Joe Newberg (via phone), Ruth Jensen, Alan Smith, Becky Galkiewicz, Steve Erickson, Mary Helen Inskeep.
 - C. President Dave Wilhelm called the meeting to order at 7:00 pm and indicated that a quorum was present.

- II. Agenda items for consideration by the Board.
 - A. Review and agree on the agenda for May 10.
 1. Board members agreed on the agenda.
 - B. Future Board meeting dates.
 1. 9 Aug 2018
 2. 8 Nov 2018
 - C. Board status Dave W.
 1. Current Board membership

a) Cathy Wait	2018 to 2021 (resigning)
b) Dave Kelso	2018 to 2021
c) Deborah Naffziger	2017 to 2020
d) Dave Wilhelm	2017 to 2020
e) Dick Bottenberg	2016 to 2019
f) Kate Clover	2016 to 2019
g) Dan Japuntich	2015 to 2018
h) John Jensen	2015 to 2018
i) Theresa Tweet	2015 to 2018
 2. Current Officers.
 - a) President – Dave Wilhelm
 - b) Vice President – Deborah Naffziger
 - c) Treasurer – Cathy Wait (resigning)
 - d) Secretary – Dave Kelso
 - D. Treasurer resignation; election of new treasurer – Cathy/Dave K
 1. Due to Cathy's resignation, Dave Kelso has offered to assume the treasurer position. M/S/P by Kate/Dan to appoint Dave Kelso as treasurer.
 2. Dave will continue fulfilling the secretary duties for the time being.
 - E. Board member resignation; election of new Board member – Cathy/Dave W
 1. Joe Newberg has offered to join the Board. M/S/P by Kate/Dan to elect Joe Newberg to the Board.
 - F. Recruitment of new Board members for 2019 – all

1. Three new members will be needed.
2. Either ask potential new Board members directly or send suggestions to Dave W.
3. Ideally, candidates should be identified before the August Board meeting so they can attend.
4. Election of new Board members occurs at the Annual meeting on Sept. 17, 2018.
5. Frank Janezich and Roxy Knuttila have expressed interest in joining the Board.

G. Treasurer's report – Cathy/Dave K

1. Treasurer transition, including signatures.
 - a) Dave W, Steve E, Dave K and Mary Helen met at TCF and re-structured the signatures for the GSM account. Dave W, Dave K and Steve E are the current signatories. Dave W and Steve E also have separate checkbooks.
 - b) Dave K will order new checks and debit card.
 - c) Financial report (can this be done with laptop and projector instead of paper?)
 - (1) Yes. Dave K will look into this for the next Bd meeting.
 - (2) In Cathy's absence Dave submitted a consolidated financial statement for Board consideration. M/S/P by Deb and Theresa to accept the financial statement.
 - (3) Board member review of finances – Deborah
 - (a) Deborah asked why the checking account balance couldn't be reduced. Dave K will look into this.
 - (4) Plans for GSM investments and savings accounts – Dave K, Mary Helen, Deborah.
 - (a) Mary Helen is completing the process of obtaining the necessary signatures for access into the Cap One accounts. Dave K and Deborah will then follow up with recommendations.

H. How should financial reports be maintained by the GSM? – Dave W, Alan

1. Dave W proposes posting them (and other sensitive information) to the password protected portion of the web site, same as the membership roster. Dave W and Alan will discuss.
 - a) No discussion as yet.
 - b) Theresa indicated some concern with posting "background check" information to the web. The Board indicated that this may not be appropriate.

I. Online application/renewal of GSM memberships – Theresa

1. At previous Board meeting, decided against this, but Theresa planned to investigate further.
 - a) The goal is to find a way to allow members to use a credit card for renewals.

- b) Discussed some of the options – paypal, the cube, square etc.
 - c) Dave W asked Theresa to forward to the Board results of her research into this.
- J. PO Box Status and Issues.
 - 1. President, Treasurer and Membership Chair should have keys.
 - a) Yes. This has been taken care of.
- K. Receiving and acknowledging in-memoriam contributions – Dave W/Dave K.
 - 1. Theresa will inform the family of the in-memoriam contributions.
 - 2. Dave K will send acknowledgement letters to the donors.
- L. Receiving, acknowledging, appraising, and disposing of material contributions (rocks, tools, et.) – Dave W
 - 1. Discussed a number of issues about this. We should discuss this later with the intent to discourage our involvement with accepting such donations.
- M. GSM Operating Manual update and review – Deborah.
 - 1. The manual is coming along nicely.
 - 2. MN Historical Society has GSM archival documents.
 - 3. See “GSM Manual Report” attached to these minutes.
- N. Membership report – Joanie
 - 1. Currently we have 190 members. 43 of them are new in 2017-2018.
 - 2. See “Membership Report” attached to these minutes.
- O. Banquets – Dave W.
 - 1. Spring banquet went very well.
 - 2. Fall banquet will be at U Garden again.
- P. Lectures and labs – Steve
 - 1. Attendance – report for 2017-2018.
 - a) See “GSM Lecture Attendance” attached to these minutes.
 - b) Proposed schedule for 2018-2019. Steve will send updated schedule to the Board.
- Q. Status of lecture video recording – Joe
 - 1. Status
 - 2. Availability & process for member access to recordings – Joe/Dave W
 - 3. Equipment purchases
 - 4. Formation of video team
 - 5. See “GSM Lecture Video Report” attached to these minutes.
- R. Status of the new GSM web site – Alan
 - 1. Nothing to report.
 - 2. Updates etc. posted to the website have been done very fast and efficient.
- S. Field Trip plans and feedback – Dave W
 - 1. Consideration of a field trip to SE Minnesota this year and possibly to Switzerland in 2020?
 - 2. See “GSM Tours and Field Trips in 2018” attached to these minutes.
- T. Video Library – Dave W

1. See "Video Library Activity" attached to these minutes.
- U. GSM contributions to SAFL education and outreach fund – Dave W
1. Completed and Dave W received a letter from SAFL thanking the GSM for the contribution.
- V. GSM scholarships – Dave W
1. ILSG student scholarship for 2018 – GSM contributed \$200 in 2017 and 2018.
- W. State Fair – Dan
1. See "GSM State Fair Committee Report" attached to these minutes.
- X. GSM Marker Survey project – Becky
1. Almost all markers have been visited.
 2. See "Geology Marker Committee" report attached to these minutes.
- Y. Minnehaha marker replacement status – Kate
1. The graphic designer is now designing but no completion date has been set.
 2. The current target budget is \$3000. M/S/P by Joan/Deb to increase the budget to \$3500 with the additional \$500 to be used as a contingency, as needed.
 3. See "Update on Minnehaha Marker" attached to these minutes.
- Z. Mineral Club Rock Show – Kate
1. Question is are we doing this again this year? Kate will look into it.
- AA. GSM Student Outreach – Theresa
1. Things are going well with good communication
 2. Steve will be added to the "Ask GSM" contact on the website.
 3. Theresa will send a report to the Board.
 4. Dee "GSM Outreach" attached to these minutes.
- BB. Transfer of GSM rock box supplies/rocks to Dave W – Dave W
1. Will be set up soon.
- CC. New Topics
1. Question – are we distributing printed materials (lecture schedule) to libraries. Yes. This should be included in the Manual.
- DD. 2018 Goals – Dave W
1. Install new big-picture marker at Minnehaha Falls during 2018.
 2. Develop a plan and prioritize marker installation/repair for Minnesota's geological markers based on the recent marker survey.
 3. Continue developing a GSM marker database and survey the markers in 2018.
 4. Develop a video recording crew and optimize the equipment and process; have first video recording of a lecture available to members in 2018.
 5. Complete update of GSM Operating Manual during 2018.
 6. Other goals we should add?
 - a) None
- EE. Adjournment
1. M/S/P by Deborah/Dan to adjourn.

III. Attachments

- A. GSM Manual Report
- B. Membership Report
- C. GSM Lecture Attendance
- D. GSM Lecture Video Report
- E. GSM Tours and Field Trips in 2018
- F. Video Library Activity
- G. Geology Marker Committee
- H. GSM State Fair Committee Report
- I. Update on Minnehaha Marker
- J. GSM Outreach

Attachment A
GSM Manual Report
Submitted by Deborah

GSM Manual report

The committee consists of Deborah Naffziger (chair), Dave Wilhelm, Dan Japuntich, Theresa Tweet and Kate Clover.

The manual is being revised to cover the various areas that operate under the GSM umbrella. We are writing the sections so hopefully a member could read them and following what is in there, be able to do the job properly.

We have been meeting off and on since November, and have gotten a great deal of work done. As of the beginning of May, the sections on President, Vice President, Secretary and Treasurer have been updated and finished. State Fair was the largest section, and that's what we tackled first. Newsletter Guidelines, Program Committee, Field Trips, Outreach and Education and Video Library sections are all done. New sections include PO Box, Marker Chair, Liaison with Harvey for the Newsletter, and Ask GSM Administrator.

Website, Video Lecture Recorder and Facebook sections have yet to be done. Society Archivist, History and Liaison sections will be included as historical. The section on the Membership Committee needs coordination with Alan. Otherwise, we are mostly done.

We'd like to have a copy for proof by August, but that depends on people generating the needed missing sections.

Many thanks to those who have submitted updates for their areas of expertise. We appreciate your time and efforts in making the manual the most complete it can be.

Thanks also to the members of the committee, who have taken time to meet and discuss. Thanks especially to Dan for the wonderful refreshments that he serves us at each meeting. Yum!

And thanks to the members who serve and keep GSM running. We discovered there are people doing things we had no idea were happening, yet which make GSM a vital and thriving organization. With such avid participation, we hope GSM will continue long into the future, so we can continue to learn about the Geological past.

Attachment B
Membership Report
Submitted by Joanie

Membership Information

As of today we have 190 members. 43 of them are new in 2017-18

2017

Glenn Lee

Internet

Bernie Waibel & Donna Rodel

Website

Terry & Kym Smith	GSM members
Tom & Marcie	Internet
Caleb Nelson	Science Museum
Agnes Tan	
D.L. Irish Rowe	internet search
Thomas Erickson	Friend sent me info about Fossils on Iron Range lecture
Chris Skapyak	Gift membership
Peter Hesse	Wayside rest in Glenwood MN
Adam Marks	Aspiring geologist and found through google search
Rodey Batiza & Jill Karsten	curious of it's existence, happy to find it exists and is active!
Mark, Sally & Sarah Pearson	Geological marker in Mounds Park
Corinne Cavanagh	Colleen & Rick Stephens
Shelly Arens	State Fair
Ann & Brian Shields	Eclipse trip (guests of Colleen & Rick Stephens)
Leslie Modrack	Solar viewing opportunity in Nebraska
Logan Connaire	family member (mother)
Ron Dexter	Mn State Fair 9/2/2017
Better Groven	
Michael & Linda Hancher	
Ken Koolmo	I first heard of GSM through meet-up.com
Teresa Russell & Norm Peterson	
Patricia Siebert	State Fair
James Gerlich	
Lisa Berndt	
Gary Hartung	State Fair
Michael Moe	
Dick Westby	
Vernon & Claire Bollesen	Neighbor
Mary B Johnston	Current Member
Barb Divinski	State Fair
Kevin Miller	Friend
Jay Maher	

2018

Neil Simonson	
Greg Mace	MN State Fair 2016
Daniel Scollan	Website
Carolyn Dry	Took a class from Jim Miller in Grand Marais
Jim Platt	Web Search
Rachel Tucker	Graduation upcoming and entrance into professional world
Stacy Schultz & Dan Dee	Worked with Dave Wilhelm at Smith Medical

Attachment C
GSM Lecture Attendance
Submitted by Steve

GSM Lecture Attendance

2017-2018

Summary: 15 lectures, 1181 total attendance, 78.7 average attendance

2018-04-16	89	Trilobites (<i>spring banquet; 3 new persons – 2 friends, 1 mother of presenter</i>)
2018-04-16	81	A Trip to the Bottom of Yellowstone Lake (<i>6 new persons – 4 through MN Earth Science Teachers Conference, 2 through friends</i>)
2018-04-02	65	When Rocks Die: The Science of Soil (<i>number of new persons not asked</i>)
2018-03-19	54	Xcel Energy Plan for the Next 25 Year (<i>no new persons</i>)
2018-03-12	57	Minnesota Geological Maps and Data Online (<i>lecture rescheduled one week later due to snow/ice; 2 new persons – father of speaker & other found us through Macalester</i>)
2018-02-26	42	Glacial Geology of Washington State (<i>lecture rescheduled one week later due to snow/ice; no new persons</i>)
2018-02-05	79	Bedrock Geology of the Twin Cities: New Insight from Recent Mapping (<i>number of new persons not asked</i>)
2018-01-29	55	The Minnesota Mineral Collection (<i>lecture rescheduled one week later due to snowstorm; 7 new persons – state fair, Minnesota Mineral Club, new members received e-mail, son is on U of M faculty</i>)

Summary for Fall 2017: 7 lectures, 659 total attendance, 94.1 average attendance

2017-12-11	86	What is Space Weather (and Why Should You Care)? (<i>4 new persons – 1 brother, 3 state fair</i>)
2017-11-27	130	Minnesota: A History of Ice, Rivers, and Landscape Change (<i>3rd highest attendance in a least 6 years; ~15 new persons – friend, web site, state fair, GSM plaque at Lake Minnewaska</i>)
2017-11-13	82	One Century and Counting: The Use of Geophysical Methods to Explore the Unseen Geology of Minnesota (<i>no new persons</i>)
2017-10-30	88	The Pros and Cons of Mining (<i>7 new persons – 4: friend/neighbor, 2: state fair, 1: MN Mineral Club Rock Show</i>)
2017-10-16	126	Agate Hunting Made Easy (<i>3rd highest attendance in a least 6 years; ~28 new persons (probably a record) – mainly from state fair</i>)
2017-10-02	73	Questions About Dinosaurs (<i>~6 new persons – state fair, friend, Mineral Club</i>)
2017-09-18	74	Historical Perspective on the Evolution of Antarctic Fish Fauna (<i>fall banquet & annual meeting; ~8 new persons – state fair, other reasons not recorded</i>)

Attachment D GSM Lecture Video Report Submitted by Joe

GSM Lecture Video Report – May 2018 Report to GSM Board

The committee consists of Joe Wright and Deborah Naffziger.

At the last Board meeting the Board agreed to the procurement of a higher quality video camera that could handle the lower light of the lectures and allow Joe to return the borrowed camcorder. Joe had found a digital camcorder that was rated higher than other camcorders in the price range. Deborah passed on the information but before Joe bought the camera a friend found a couple articles that reviewed newer DSLRs that also do quality video. These look very interesting as they could also be used by the GSM on field trips and take high quality still pictures. Joe hasn't narrowed down the choices but will during May.

I have all the video files from the lectures that I have attended and will get them all into folders for build up into completed videos. I was talking to Amy Okaya at the banquet about the videos. She has experience with uploading large files to YouTube. (She is the young lady whose husband died in February.) I may contact her about putting the files up on the net. She seemed very confident that the results would be good and may be a great addition to the video team.

Sorry about the very long delay in completed videos.

Joe

Attachment E GSM Tours and Field Trips in 2018 Submitted by Dave W

GSM Tours and Fields Trips in 2018

On Wednesday, April 25, 2018, 11 GSM members participated in a 1.5 hour tour of the [St. Anthony Falls Laboratory](#), organized by Dave Wilhelm and conducted by Lab personnel. Dave will organize future tours of this unique lab and its varied experiments each semester as member interest dictates.

The [University of Illinois Twin Cities Alumni Association](#) arranged a visit to [Eagle Lake Observatory](#) on Friday, May 4, hosted by the [Minnesota Astronomical Society](#). As there was room for additional participants, they generously invited GSM members and friends to join them, which about six did.

The following field trips and tours are planned by the Geological Society of Minnesota for 2018.

Dave Wilhelm is arranging two tours of the [St. Paul Water Treatment Plant](#). These tours are scheduled for **Wednesday, May 23 at 1 PM and at 3 PM.**

A field trip to [Isle Royale National Park](#) during **June 18 through 24, 2018**, led by Erika Vye, Bill Rose, and Stephen Roblee. This trip will leave on the [Ranger III](#) from Houghton, MI, spend 3 full days on Isle Royale, returning on the Ranger III on the fifth day. The sixth day will be an overview of Keweenaw geology. While on Isle Royale, the Michigan Tech research vessel [Agassiz](#) will take participants to many scenic and geologically interesting sites, allowing them to see the beauty and geology of Isle Royale from both land and water. The trip web site is [here](#). This trip is currently filled to its capacity of 17.

A field trip is being planned by Mary Kay Arthur and Deborah Naffziger in the [Thunder Bay, Ontario](#) area during **July, 2018**, led by members of the [Ontario Geological Survey](#). The entire organized trip will be 3 days, from **Thursday, July 19 through Saturday July 21**. Here are the plans for each of those 3 days:

- On **July 19**, visit two amethyst mines: [Diamond Willow Amethyst Mine](#) and [Panorama Amethyst Mine](#).
- On **July 20**, geologists from the [Ontario Geological Survey](#) will lead us to the debris-site [breccias](#) from the 1850 million-years-ago (mya) [Sudbury Impact](#) event, the [Kaministiquia River Valley](#) and its [Kakabeka Falls](#), evidence of the approach and retreat of the Superior Lobe Glaciation, and [Midcontinent Rift](#) Formations.
- On **July 21**, geologists from the Ontario Geological Survey will lead us east to the formations of the [Sibley Peninsula](#) and its [Sleeping Giant Provincial Park](#).
- We suggest that participants spend a fourth day touring historic **Fort William** (<http://fwhp.ca/> & <http://fwhp.ca/visit-us/hours-of-operation-rates>), which covers the history of the North American fur trade as a living history trading post set in 1816 (with enactors in historically accurate costumes). However, that won't be an official part of this trip.

All persons are responsible for arranging their own transportation to Thunder Bay and their accommodations.

Tentatively, **Randy Strobel, Joanie Furlong, Roger Benepe, and Steve Erickson** are planning a field trip to **southeastern Minnesota and northeastern Iowa**, to study geology, visit caves, and hunt fossils. Trip length will be 2 to 4 days over a weekend, probably in September. Members will receive further information by e-mail as it develops. Randy & Joanie (and perhaps Dave Wilhelm) are planning a scouting trip during May.

One or more 90-minute walking tours of the building stones and architecture of downtown **St. Paul** will be conducted, using the book "Rocky Roots" as the primary source book. These will most likely be done during a Sunday afternoon in **early October**. We will not cover all of St. Paul, but a short 1½-mile course from the [Science Museum of Minnesota](#) to [Rice Park](#), [Landmark Center](#) and several other interesting buildings along St. Peter Street and Wabasha.

Looking *much* further ahead, **Dave McGill** is investigating a trip to **Switzerland**, to be led by local geologists, during summer 2020. If this develops, information will be presented to members during fall, 2018. Dave Wilhelm and Randy Strobel plan to meet with Dave M in May or June 2018 in advance of Dave M scouting this trip in August.

Attachment F
Video Library Activity
Submitted by Dave W

Video Library Activity
08-FEB-2018 through 10-MAY-2018

New VL members: none

Rentals: 30

Purchases: 9 for \$158.88

Donations: 8: 1 from Becky Galkiewicz and 7 from Kate Clover

Total Titles: 310

New reviews: 5 (Deborah Naffziger & Becky Galkiewicz)

Finances:

\$9 cash
Deposited \$45 on 06-MAY-2018

Attachment G
Geology Marker Committee
Submitted by Becky

Geological Society of Minnesota
Geology Marker Committee
Report to the Board of Directors, 10 May 2018

The Marker Committee has 6 members: Dan Japuntich, Alan Smith, Lee Kaphingst, Kate Clover, Dick Bottenberg, and Becky Galkiewicz.

Progress Report:

All of the existing stone monuments with brass plaques have been visited at least once by one of the Committee members or by a volunteer – 53 markers. Most of these were originally installed by GSM. A few were installed by the Historical Society but pertain to geology and so, have been included. This is why we no longer call the markers “GSM markers”. Also, many of the markers are not road-side so we no longer call them “Road markers”. Finally, we decided to call the whole collection of markers the “Minnesota Geology Tour.”

In addition, there are 16 markers that have text written and locations chosen but were not installed in 2003 or 2009. The Committee has decided to call them “Digital Markers” - no monument with plaque. Instead a sign says, “Geology Tour – Scan the QR Code for more information” which takes the explorer on his/her I-phone to the Geology Tour Home Page for the text.

Now that we have completed the first phase of the project, it's time to move on to making the experience user-friendly.

Plans:

1. This summer, rewrite and program the GSM Home Page to contain a new Geology Tour Home Page that explorers will find user-friendly. Make sure explorers can access using lap-top and tablet computers and I-phones. Provide access to the 12 Field Trips and to the individual markers (text, GPS and directions) in each Field Trip. Include a way of receiving comments and questions from explorers.
2. Obtain a QR Code for the Geology Tour Home Page. Or provide GSM web address.
3. In time for State Fair, create a pamphlet with the QR Code and web address to explain the Geology Tour to State Fair attendees who come to the GSM booth. Encourage GSM volunteers to talk about the Geology Tour.

Later:

1. Talk to DNR about geo-caching, Geology Tour signs, and new resources for state park rangers.
2. To get ready to install the 16 Digital Markers, contact DNR and cities where the markers will go and ask for permission.
3. Contact Minnesota Tourism (www.ExploreMinnesota.com) about getting listed on their web-site of things to do in Minnesota, also about writing an article for the MN Explorer advertising supplement.
4. Contact Greg Brick about writing a newspaper article on the Geology Tour and geotourism.
5. Inform Minnesota science teachers about the availability of the Geology Tour for student projects.
6. Work with Minnesota Geological Survey.

Attachment H
GSM State Fair Committee Report
Submitted by Dan

GSM State Fair Committee Report for May 10, 2018
Chair: Daniel Japuntich

State Fair Committee: Rebecca Galkiewicz, Dan Japuntich, Debra Preece, Dick Bottenberg, Edward Steffner, Ly Preece., Roger Benepe, Sandra Steffner, Theresa Tweet, Patrick Pfundstein

Report:

- 2018 State Fair License Agreement – complete.
 - Received license agreement/invoice and returned payment.
 - Submitted Proof of liability insurance (certificate of ins. to State Fair).
 - Submitted Workers' comp. Insurance form (lime color to fair).
- The Booth staffing recruitment note was included in newsletter.
- Booth staffing lecture announcements were made before and at the three final spring meetings, with future periodic broadcast announcements every two weeks.
- As of this date, the State Fair Booth staffing is 68%. (49 out of 72 people). Previously at this date, staffing was in 2017-75% and in 2016- 83%.

- A State Fair Committee meeting will be held tentatively in July at my home at 1092 Lincoln Avenue, St. Paul.
- Booth set-up is Wed. Aug. 22 at 11:00. Booth take-down is Sept. 4. At 11:00. Meeting at my house.
- When the 2018-2019 Lecture Schedule is received, it will be “ready-for-printing” formatted, and the brochures will be printed.
- State Fair Booth Timeline attached.

GSM STATE FAIR SCHEDULE		1-Jan	1-Apr	1-May	7-Jun	14-Jun	21-Jun	28-Jun	5-Jul	12-Jul	19-Jul	26-Jul	2-Aug	9-Aug	16-Aug	22-Aug	23-Aug	4-Sep	18-Sep	29-Sep	1-Nov
WEEK		1-Jan	1-Apr	1-May	7-Jun	14-Jun	21-Jun	28-Jun	5-Jul	12-Jul	19-Jul	26-Jul	2-Aug	9-Aug	16-Aug	22-Aug	23-Aug	4-Sep	18-Sep	29-Sep	1-Nov
	TASKS																				
	RECEIVE COLORED CONFIRMATION CARD																				
	RECEIVE LICENSE AGREEMENT/INVOICE-RETURN PAYMENT																				
	PROOF OF LIABILITY INS. (CERTIFICATE OF INS. TO STATE FAIR)																				
	WORKERS' COMP. INSURANCE FORM (LIME COLOR TO FAIR)																				
	BOOTH STAFFING RECRUITMENT IN NEWSLETTER																				
	BOOTH STAFFING LECTURE ANNOUNCEMENTS																				
	CONFIRM STATE FAIR COMMITTEE MEMBERSHIP																				
	STATE FAIR COMMITTEE MTG.																				
	BOOTH STAFFING ANNOUNCEMENT, EMAIL BROADCASTS																				
	COMPILE MN SF FOLDERS, TICKETS, INFO																				
	SEND REMINDERS TO VOLUNTEERS																				
	BOOTH STAFFING PHONE CALLS (IF NECESSARY)																				
	LECTURE SCHEDULE COMPLETION (STEVE TO BILL R.)																				
	FORMAT BROCHURES FOR PRINTING (BILL R.)																				
	PRINTING BROCHURES, MEMBERSHIP SLIPS, (STEFFNER)																				
	BOOTH SET-UP REMINDER TO COMMITTEE																				
	BOOTH SET-UP: BRING HANG-TAGS (4-5 PEOPLE)																				
	STATE FAIR																				
	BOOTH TAKE-DOWN REMINDER TO COMMITTEE																				
	BOOTH TAKE-DOWN: BRING HANG-TAGS (4-5 PEOPLE)																				
	SUBMIT THANK YOU TO NEWSLETTER																				
	PARTICIPATION LICENSE SIGNED AND RETURNED																				

STATE FAIR BOOTH STAFFING 2018

DATE	9 AM TO 1 PM	1 PM TO 5 PM	5 PM TO 9 PM
23-Aug THURS	Ed Steffner	Mark Nupen	Bernie Waibel
	Ted Chura	Harry Werneke	Donna Rodel
24-Aug FRI	Mark Nupen	Lee Kaphingst	
25-Aug SAT	John Jensen		Paul Jansen
	Ruth Jensen		Janet Hopper
26-Aug SUN	Bill Robbins	Dick Bottenburg	David Wilhelm
	Vern Schaaf	Joe Wright	Mary Kay Arthur
27-Aug MON	Maureen Scaglia	Patrick Pfundstein	Michael Convery
		John Matlock	Faye Alroy
28-Aug TUES	Alfred Kauth	Heather Johnson	
		Jim Mirick	
29-Aug WED	Claude Buettner	Mark Nupen	
	Carol Kissner	Jim Mirick	
30-Aug THUR	Jim Curme	Frank Janezich	
	Patsy Huberty	Roxy Knuttila	
31-Sep FRI	Steve Erickson	Dick Heglund	Lynne Grigor
	Rosie O'Donovan	Mary Helen Inskeep	
1-Sep SAT	Steve Erickson		Deb Preece
			Ly Preece
2-Sep SUN		Alan Smith	Joanie Furlong
		Kay Smith	Randy Strobel
3-Sep MON	Ken Holmbeck		Dan Japuntich
			Dorothy Edelson

Attachment I
Update on Minnehaha Marker
Submitted by Kate

To: GSM Board
From: Kate Clover
Date: May 2., 2018

Re: Update on Minnehaha Marker

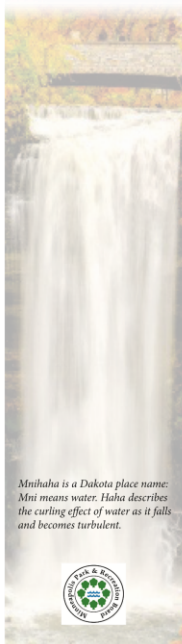
Progress on the Minnehaha Marker continues. Chris Burda and I have finished our writing and initial layout of the marker, and Chris will be handing over a jumpdrive with all the files to the Minneapolis Park Board by the end of this week, (by May 4).

Once the graphic designer at the park places our text and illustrations into the park interpretative sign template, we can expect to see a draft. We may have to make adjustments once we see how everything fits onto the panel.

I expect we can install this interpretative panel sometime Summer 2018. Once installed, I will submit an article with a photograph of the maker for the GSM newsletter.

Waterfall Geology

Minnehaha Regional Park



Minihaha is a Dakota place name. Mini means water. Haha describes the curling effect of water as it falls and becomes turbulent.



Waterfalls retreat upstream

Nearby, Minnehaha Falls plunges 53 feet into the river gorge on the creek's final, mile-long journey to the Mississippi River. The falls appear permanent, but all waterfalls gradually retreat or move upstream.

This is the story of two waterfalls moving in geologic time. Minnehaha Falls retreated up Minnehaha Creek, and glacial River Warren Falls (now at St. Anthony Falls) retreated up the Mississippi River. Their paths met 10,000 years ago. Steep-sided gorges carved by the falls are evidence of their journeys.

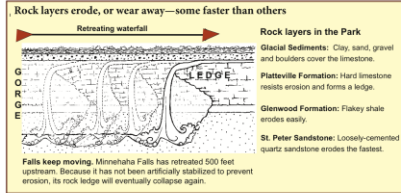


A. Bridge #2: Birthplace of Minnehaha Falls
B. Present-time location of Minnehaha Falls
C. Minnehaha Creek and gorge
D. Present-time mouth of Minnehaha Creek at the Mississippi River
E. Ford Dam

Why do waterfalls move?

Waterfalls form where a stream flows over a hard rock ledge and erodes the weaker rock below. This process undercuts the ledge leaving it unsupported to eventually collapse. Repeated undercutting and collapse results in the falls retreating upstream and carving a gorge.

Here at Minnehaha Falls, water flows over hard limestone onto sandstone, creating a waterfall that moved up the creek. The same geologic process created glacial River Warren Falls in Saint Paul and caused its retreat up the Mississippi River.



13,000 years ago



Meltwater from glacial Lake Agassiz pooled into glacial River Warren (Minnesota River) and overwhelmed the tiny Mississippi River.

10,000 years ago

Minnehaha Falls started near Bridge #2 and has since retreated 500 feet to its present location. The falls began as glacial River Warren Falls retreated, split around an island in the Mississippi River and started the falls at the mouth of Minnehaha Creek.

As glacial River Warren Falls retreated, the falls on the eastern channel passed the upstream end of the island first and caused the western falls and channel to dry up. Today, Minnehaha Creek flows in the former western channel.



Then: Western Channel / Eastern Channel
Now: Western Channel / Eastern Channel

Present time

By 1860, the falls that started in Saint Paul had retreated to Minneapolis to where St. Anthony Falls are today. The falls are now stabilized with concrete.

2000 years ago

The falls continued to move upstream.

10,000 years ago

Minnehaha Falls started here

11,000 years ago

The falls reached Fort Snelling at Idaho. Idaho is the Dakota word for the junction of two rivers.

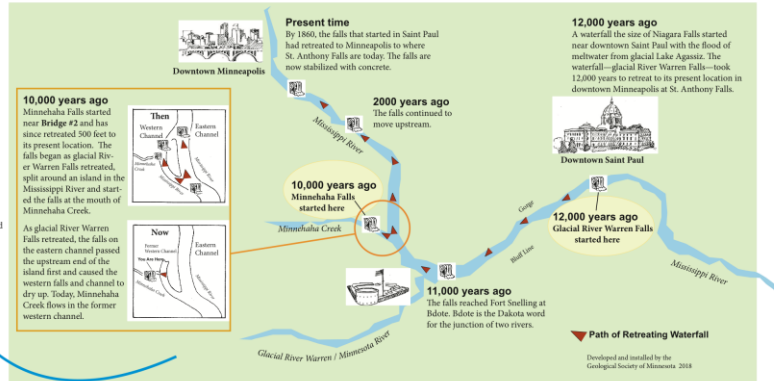
12,000 years ago

A waterfall the size of Niagara Falls started near downtown Saint Paul with the flood of meltwater from glacial Lake Agassiz. The waterfall—glacial River Warren Falls—took 12,000 years to retreat to its present location in downtown Minneapolis at St. Anthony Falls.



12,000 years ago

Glacial River Warren Falls started here



Attachment J
GSM Outreach
Submitted by Theresa

GSM Outreach

GSM Outreach is doing well. Macalester had their final week of classes during the week of May 4th. With the 2017-2018 school year coming to a close and students returning home for the summer, for the most part, presentations are done. We have a few students returning next year, which is a plus. Jeff Thole set the group up with our own Team Drive, "Geological Society of Minnesota" for storing the presenters PowerPoints, which is another plus. We had a great year with Macalester students and we are looking forward to an even better year for the 2018-2019 season. Joy, my co-coordinator is doing an Internship at this time as well as her thesis and has been very busy, so not quite sure how our schedules will work out next fall.