

Geological Society of Minnesota
Board Meeting Minutes for February 28, 2019

- I. Notes and opening comments.
 - A. Board members present: Wolf Bielefeld, Joe Newberg (via phone), Dave Kelso, Deborah Naffziger, Dave Wilhelm, Dick Bottenberg (via phone), Kate Clover.
 - B. Other GSM members present: Steve Erickson, Roger Carpenter, Joel Renner, Alan Smith, Pat Pfundstein
 - C. President Dave Wilhelm called the meeting to order at 7:00 pm and indicated that a quorum was present.
 - D. Minutes for the November 18 Board meeting were previously approved by e-mail and posted on the GSM website. FYI: Board members have 10 days to review the preliminary minutes after the Secretary sends them out. Please be sure to do that by the date set by the Secretary.

- II. Agenda items for consideration by the Board.
 - A. Review and agree on the agenda for February 28, 2019.
 1. Board members agreed on the agenda.
 - B. Future Board meeting dates.
 1. 16-May-2019
 2. 8-Aug-2019
 - C. Board status Dave W.
 1. Current Board membership

a) Wolf Bielefeld	2019 to 2022
b) Roxy Knuttila	2019 to 2022
c) Frank Janezich	2019 to 2022
d) Joe Newberg	2018 to 2021 began May, 2018
e) Dave Kelso	2018 to 2021
f) Deborah Naffziger	2017 to 2020
g) Dave Wilhelm	2017 to 2020
h) Dick Bottenberg	2016 to 2019
i) Kate Clover	2016 to 2019
 2. Current Officers.
 - a) President – Dave Wilhelm
 - b) Vice President – Deborah Naffziger
 - c) Treasurer – Dave Kelso
 - d) Secretary – Dave Kelso

 - D. Treasurer's report – Dave K
 1. Financial Report (report using laptop)
 - a) **M/S/P** (Kate/Wolf) to accept the Financial Report.
 2. Board member review of finances – Deborah

- a) Deborah has reviewed the checkbook register and TCF bank statements for the last three months and found things to be in order.
- 3. Plans for GSM investments and savings accounts – DaveK/Deborah
 - a) Deborah and DaveK will meet with a Broker (familiar to Deborah) and determine what investment options are available to the GSM.
- E. How should financial reports be maintained by the GSM? Dave W/Alan
 - 1. Dave W proposes posting them (and other sensitive information, but not background checks) to the password-protected portion of the web site, same as the membership roster. Dave W & Alan to discuss.
 - a) No action taken – currently on hold.
- F. Membership report – Joanie
 - 1. This report should include summary of all members and of new members.
 - 2. Report on distribution and cost of Membership Directory.
 - a) See “Membership Report” attached to these minutes.
- G. PO Box Status and Issues
 - 1. President, Treasurer and Membership Chair have keys. Box has been checked semi-regularly, typically 1-2 items per week, after the rush of membership renewals in September and October.
 - a) No action taken
- H. GSM Operating Manual update and review – Deborah
 - 1. No progress to report; Dave W has not completed writing the sections for the website and video recording.
 - a) Dave W stated that he will work on this for the next Board meeting.
 - b) Some discussion as to Joe Wright’s availability to record lectures as he travels.
- I. State Fair – Dan
 - 1. See “State Fair Committee Report” attached to these minutes.
- J. GSM Website – Alan
 - 1. Renewal for current website. Web hosting on our ISP Hostmonster is coming due on May 11, 2019. There are three options.
 - a) 12 months at \$27.99 a month, total \$335.88 for a year
 - b) 24 months at \$26.49 a month, total \$635.76 for a year
 - c) 36 months at \$25.49 a month, total \$917.64 for a year
 - (1) **M/S/P** (Joe/Deb) to renew the web hosting contract with Hostmonster for the 36 months option. Dave K will work with Alan to set up a suitable payment process.
 - 2. Status of new website – no action taken
 - 3. Lack of website coverage when Alan is unavailable.
 - a) Dave W will check with Joanie and see if she can help Alan out when he is not available.
- K. GSM Marker Survey project – Becky
 - 1. Status

2. Report on Portsmouth Mine marker
 - a) See "Marker 2019 Feb Board Report" attached to these minutes.
- L. Minnehaha marker replacement status – Kate
 1. See "Marker" attached to these minutes.
- M. GSM scholarships – Dave W
 1. ILSG student scholarship for 2019 – GSM contributed \$200 in 2018
 - a) **M/S/P** (Deborah/Kate) to fund \$200 to the ILSG scholarship.
- N. Report on in-memoriam contributions – Theresa/DaveK
 1. Nothing to report.
- O. Receiving, acknowledging, appraising, and disposing of material contributions (rocks, tools, etc.) – Dave W
 1. Dick B received materials from Doug Z that he is delivering to Dave W that need to be inventoried.
 - a) Progressing..
 2. Materials (field trip itineraries, notebooks, photos) were donated by family of Judy Hamilton. More might still be coming.
 - a) Dave W has made initial inventory; no further progress since November.
 - b) Many Newsletters, some of which we might be missing; need to compare with what is on website.
- P. Adding a lifetime membership category and/or multiyear membership renewal.
 1. At a previous meeting, decided that the Board could designate, at its pleasure, lifetime memberships to persons who made exceptional contributions to GSM.
 2. Report of lifetime membership for Doug Zbikowski.
 - a) Dave K indicated that late last year a letter was drafted and sent to Dave W for review and approval. Dave K will follow up and determine what the status is.
- Q. Banquets – Dave W
 1. Spring Banquet – Dave W has informed U Garden that we want to hold our banquet there on May 6, 2019. Terms are the same as the Fall Banquet.
- R. Lectures and Labs – Steve
 1. Report on this year's lectures & labs – Steve reported that the Fall lectures went well with good attendance and the schedule is coming along.
 2. Report on 3M contribution for volunteer hours – Steve reported that the GSM should be receiving \$500 for his volunteer hours through 3M. The Board thanks Steve for all his hard work.
 3. Report on attendance figures – please see "GSM Lecture Attendance" attached to these minutes.
 4. Plans for next year's lectures & labs – Steve reported that this is in progress. Please see "Possible Mondays 2019_20" attached to these

minutes where the Board has shown a preference for 3 Feb, 17 Feb, 2 Mar lecture dates.

5. Possible added lecture in May by nationally recognized author Peter Brannen which was suggested by Carrie Jennings. Dave W will keep the Board informed if this should be done.
 6. Discussion on allowing members to sell books, CDs, etc., at lectures and banquets.
 - a) In general, the Board feels that this would be o.k. at the banquets but not o.k. at the lectures. Lectures are held on the campus of the University of Minnesota and we want to avoid any implied endorsement of products.
- S. Status of lecture video recording – Joe W (No actions taken)
1. Status
 - a) Pat Pfundstein has offered to look into what it would take to set up a you tube channel for viewing GSM recorded lectures.
 2. Availability & process for member access to recordings – Joe W/Dave W
 3. Equipment purchases
 4. Formation of video team
 5. Complementary recording to each presenter?
- T. Field Trip plans and feedback – Dave W
1. No firm plans yet for 2019 but Randy & Joanie hope to do a Driftless Area trip sometime during the summer.
 2. Please see “Field Trips & Tours Board Report for 2019” attached to these minutes.
- U. Video Library – Dave W
1. Please see “Video Library Board Report Feb 2019” attached to these minutes.
- V. GSM Student Outreach – Joel Renner
1. Joel is filling in for Theresa and indicated that a few talks per year are on-going.
 2. The Board thanks Joel for stepping up to work with Theresa.
- W. “Ask GSM” activity – Theresa
1. Please see “GSM Questions Update Aug 2018 – Feb 2019” attached to these minutes.
- X. MN Earth Science Teacher (MESTA) Conference (Friday Feb 1, 2019) – Theresa & Steve
1. Steve attended and “mingled” around the conference for about an hour.
 2. Please see “GSM 2019 MESTA Conference” attached to these minutes.
- Y. Newsletter – Theresa & Mark
1. The newsletter has been emailed.
- Z. Holiday party – Theresa
1. Please see “GAM Holiday Celebration February” attached to these minutes.
 2. Gift card?

- a) **M/S/P** (Wolf/Joe) to thank the Steffners for their hospitality and include a \$50 gift card. Dave W will take care of this.

AA. New topics – None

BB. 2019 Goals

1. Install new big-picture marker at Minnehaha Falls during 2019.
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 2019.
4. Develop video recording crew and optimize the equipment and processes; have first video recording of a lecture available to members in 2019.
5. Complete update of GSM Operating Manual during 2019.
6. Others goals we should add?
 - a) None at this time

CC. Adjournment

1. M/S/P (Deborah/Dick) to adjourn

III. Attachments

- A. Membership Report
- B. State Fair Committee Report
- C. Marker 2019 Feb Board Report
- D. Marker
- E. GSM Lecture Attendance
- F. Possible Mondays 2019_20
- G. Field Trips & Tours Board Report for 2019
- H. Video Library Board Report Feb 2019
- I. GSM Questions Update Aug 2018-Feb 2019
- J. GSM 2019 MESTA Conference
- K. GSM Holiday Celebration – February

Attachment A
Membership Report
Submitted by Joanie

Membership report

Feb 28, 2019

Cost of printing and mailing membership directory is about \$200

We have 177 members now with an expiration date of 9/30/2019

50 members did not renew in 2018. So we have a drop out rate of about 1/3.

Below is new members, 33 since start of last year 2018

2018

Neil Simonson

January

Greg Mace

February

MN State Fair 2016

Daniel Scollan	February	Website
Carolyn Dry	February	Took a class from Jim Miller in Grand Marais
Jim Platt	February	Web Search
Rachel Tucker	April	Graduation upcoming and entrance into professional world
Stacy Schultz & Dan Dee	May	Worked with Dave Wilhelm at Smith Medical
Sara Huffman	May	Website
Gaby Sasseille	May	Online
Richard Bokovoy	May	My U of M Geology 1001 Professor
Olivia Hanson	May	Google
Jim Maas	May	
Kate Kleiter	June	On-line AIPG, API
Marilyn Johnson	June	interested in field trip, checked out website
Brent Silvis	July	Web Search
Adam Pofert	July	Fossil Hunting
Anne Briese	August	State Fair
Carolyn Sampson	August	A friend who brought me to a lecture
Karen Mosso	September	MN State Fair
Gary Lorenz	September	Member many years ago
P Jane Stauffer	September	State Fair
Robert Randall Hall	September	State Fair
Chris Cordes	October	Gift subscription from friends
Gregory Beckstrom	October	
Nancy Rand	October	Another member invited me. I came to a lecture, was impressed more
David Ondich	October	I have attended GSM program in the past
Rod Leas	October	
Angela & Peter Delong	October	State Fair
James Brass	December	State Fair
Carol Nankivel	December	State Fair
		2019
Ann Brown	January	MN State Fair
Sherry Kutter	February	I'm purely an amateur but am retired now and always loved
Margaret Windingstad	February	Booth at the State Fair

Attachment B
State Fair Committee Report
Submitted by Dan

GSM State Fair Committee Report for February 28, 2019
Chair: Daniel Japuntich

State Fair Committee: Rebecca Galkiewicz, Dan Japuntich, Edward Steffner Roger Benepe, Sandra Steffner, Theresa Tweet, Patrick Pfundstein

Report:

- Registration for the license for the 2019 Minnesota State Fair booth was sent in last fall, and the License Registration Confirmation Card was received in November.

Attachment C
Marker 2019 Feb Board Report
Submitted by Becky

Geological Society of Minnesota

Marker Committee Report – February 28, 2018

Dave Wilhelm's focus for 2019 includes 3 items about the geological markers

- finish the Minnehaha Falls marker
- develop a plan and prioritize marker installation/repair for geological markers based on recent marker survey
- Continue developing a GSM marker database and survey the markers in 2019

The Geological Marker Committee has been operating for about 5 years. We have arrived at step 3 of our 6-step plan:

1. Find the existing markers, photograph them and get GPS coordinates.
2. Build/modify the database/home page to allow people easy access
3. Publicize to GSM, to state agencies, tourism, special groups, State Fair, state parks
4. Consider what future markers will look like? (traditional stone base and slanting bronze tablet, Split Rock Lighthouse, virtual, “lollipop”, Keewanau) Who will we work with? (funding, logistical support, publicizing, etc.)
5. Plan and prioritize installing the missing markers; also new sites/subjects.
6. Recordkeeping to track status of all geological markers.

Recent work has focused on Step 3 – collaborating with other agencies in the state. In the past year, we have contacted the following:

1. Minnesota Geological Survey (Harvey and Rich) to create a brochure about the markers for distribution at the 2018 State Fair
2. Minnesota Historical Society (Todd Mahon) to talk about where they get their markers made (sewahstudios.com), the need to erect a marker at the Beaver Creek Visitor Center (SW Minnesota), and ideas for collaborating.
3. DNR (Veronica Jaralambides) to talk about collaborating
4. DOT (Brett Stark in Brainerd) to talk about moving a marker (Portsmouth Mine in Crosby) so DOT can install a tunnel under the highway. Requested “Geological Marker ahead” signs for the highway.
5. GSM had a booth at the Minnesota Earth Science Teachers Association annual conference. Next year, distribute the marker brochure. GSM has been present at the conference several years, thanks to Theresa.
6. Planned additional contacts – Minnesota tourism, newspapers, geology teachers
7. State Fair – from now on, distribute Geological Markers brochure at every State Fair

Questions:

1. What changes are planned for the database and accessing it?
2. Who will install the markers?

3. What will be the impact on GSM? Many people join GSM for the lectures and field trips. Some don't like driving around the state. Are we building the network for people who don't currently belong to GSM? Will we be able to attract new people to carry this forward?
4. Where will the money come from?

The Marker Committee: Kate Clover, Becky Galkiewicz, Alan Smith, Lee Kaphingst, Dan Japuntich, Dick Bottenberg

Attachment D
Marker
Submitted by Kate

Minnehaha marker status.

1. At the last board meeting Kate and I reported at the Minnehaha marker project is basically on hold. MaryLynn, the Minneapolis Park liaison, reported that the person working the marker design illustration had resigned and moved to Arizona.
2. MaryLynn now reports that the replacement new hire reported to work in late January. MaryLynn hopes to meet with the GSM in early March to determine how to finish the project. A date to meet has not been established.

Attachment E
GSM Lecture Attendance
Submitted by Dave W

GSM Lecture Attendance

2018-2019

Summary for 2018-2019 to date: 10 lectures, 922 total attendance, 92 average attendance

2019-02-25	85	Dinosaurs and Our World (<i>7 new persons – website, state fair</i>)
2019-02-11	79	The Great Magnet: Paleomagnetism and The Earth's Magnetic Field (<i>1 new person – friend</i>)
2019-02-09	~45	Learning How to Identify Minnesota's Fossils (<i>Saturday lab; not included in averages</i>)
2019-01-28	52	The Nitrate Contamination Problem in Southeastern Minnesota: The Importance of Geologic Controls (<i>weather was far from ideal; 2 new persons – website, friend</i>)

Summary for Fall 2018: 7 lectures, 706 total attendance, 101 average attendance

2018-12-10	93	Life and Death in Ancient Madagascar: Updates on the Spectacular Taphonomy of the Cretaceous Maevarano Formation (<i>no new persons</i>)
2018-11-26	101	Getting to the Core: Understanding Past Climate, Human Impacts, and Geological Processes using Lake Sediment Core Samples (<i>5 new persons – web site, friends. Two new attendees were researchers from Science Museum of MN conducting research</i>)

2018-11-12 113 Tectonics versus Sea-Level Change in the 21st Century (8 new persons – state fair, friends. Parking issues caused at least 2 persons to not attend)

2018-10-29 110 Meteorites: Hard Evidence in the Mystery of our Cosmic History (~12 new persons)

2018-10-15 95 Looking for Evidence of Life in the Rock Record: Yellowstone National Park Hot Springs, 3.5 billion-year-old Deposits in Australia, and the Mars2020 Rover Mission (10 new persons – state fair, friends, St. Thomas geology prof, rock show)

2018-10-01 82 The Flambeau Mine, Ladysmith, Wisconsin: Geology, Minerals, Reclamation (12 new persons – state fair, friends, Harvey, internet)

2018-09-17 112 Caves of Minnesota (fall banquet & annual meeting; ~9 new persons – state fair, website)

Attachment F
Possible Mondays 2019
Submitted by Steve

Mondays, Fall 2019

September 16	September 23	<i>(GSA Annual Phoenix AZ 22 to 25)</i>
September 30 <i>(Rosh Hashanah)</i>	October 7	<i>(Yom Kippur 8-9)</i>
October 14	October 21	
October 28	November 4	
November 11	November 18	
November 25 <i>(Thanksgiving 28)</i>	December 2	
December 9		<i><u>Final Exams Dec. 16 (no lecture time available)</u></i>

Mondays, Spring 2020

MLK University closed 20 January 2020

27 January 2020 (first Monday available)	3 February
10 February	17 February
24 Feb	2 March

U of M Spring Break

March 9 to 13 School Closed so March 2 or 16 or Lab Sat. March 7

Macalester Spring break

March 14 to 22 so no lab available on March 14

March 23	16 March
April 6	30 March
April 20	13 April
May 4	27 April
	11 May

Attachment G
Field Trips & Tours Board Report for 2019
Submitted by Dave W

Not much new to report of the field trip front, but we did complete one more tour of the St. Anthony Falls Lab in late November, in which 11 participated. You can find a recap of our very full field trip schedule for 2018 (and many prior years) on our web site. **Deborah Naffziger's** report on our great Thunder Bay field trip is in the Feb 2019 Newsletter. Currently, we have no specific field trip plans drawn up yet for 2019. In particular, **Randy Strobel** and **Joanie Furlong** would like to lead a trip to the Driftless Area of southeastern Minnesota and neighboring states sometime this summer. They and Dave Wilhelm scouted for this trip last May, but could not fit it into our busy field trip schedule last year. Members will be informed by e-mail about this trip and others as plans develop.

Attachment H
Video Library Board Report Feb 2019
Submitted by Dave W

Video Library Activity
09-NOV-2018 through 28-FEB-2019

New VL members: 1 (Ronald Corradin)

Rentals: 43

Purchases: 0

Donations: 9 donations (1 Deborah Naffziger; 8 Patrick Pfundstein)

Total Titles: 319

New reviews: 6 (Deborah)

Finances:

\$50 deposited on 19-DEC-2018

\$24 cash

Attachment I
GSM Questions Update Aug 2018 to Feb 2019
Submitted by Theresa

GSM Questions Update 8/1/2018 - 2/21/2019
Questions do not include multiple replies

1. Information on Superior Agates: - 2/25/2019: Charles G - What are the officially recognized types of Lake Superior agates, Charles was wanted to start an agate collection so I sent him a few online links. (Theresa Tweet)
2. Student Opportunities - 2/22/2019: Taylor C - Taylor wanted some information about available positions (volunteer or paid) with the GSM. (Theresa Tweet)
3. 20 pound meteorite – (original email date 12/31/2018), follow-up 2/7/2019: Paul E - Paul was given a “meteorite” by Grandfather and would like to have it properly identified. Jeff Thole put a small piece of it in the Macalester spectrometer – it was not a meteorite and was instead identified a piece of float copper. (Jeff Thole)
4. K-5 Cub Scout Banquet Presentation- 1/20/2019: Anna L - Anna would like a presentation for a banquet, I notified Presenters. (Theresa Tweet)
5. Classroom Presentation - 1/6/2019: Courtney B - Would like a presentation, unfortunately her school is in Duluth. I contacted the students for their input, and no one responded. (Theresa Tweet)
6. Rock Identification – 1/1/2019: Albert C. I recommended the Macalester Lab, one of the GSM Seminars, or taking to a trusted rock shops and provided the links. (Theresa Tweet)
7. Cub Scout Den wishing to attend Macalester Lab – 12/20/2019: Marcia H. Theresa contacted Jeff and he is looking forward to seeing the group at the GSM Lab. (Theresa Tweet) Marcia later changed her mind about bringing her group of scouts to the Lab.
8. Gift Membership/Donation –12/19/2018: Sarah S. (Dave Wilhelm)
9. Adding a Mohs Scale of Metal Hardness to our links page - 12/18/2018: Andrea M. Unable to post because it is linked to a business, thanked her and her daughter, and then told her about the Macalester Lab on February 9th. (Theresa Tweet)
10. Help Testing Survey for Scientific Events - 11/26 Seminar – 11/18/2018: Lecture Survey. (Steve Erickson and David Wilhelm)
11. Classroom Presentation - 11/20/2018: Lori L. (Theresa Tweet) Theresa contacted her twice, but as of yet, has not heard back from Lori.

12. Earthquake Information - 11/19/2018: Don J . Gave the GSM a site bearing Information on dealing with the aftermath of an earthquake; now on our GSM Webpage. (David Wilhelm)
13. Rock Identification - 11/18/2018: Harald L. (Theresa Tweet)
14. Agate Field Trips – 11/12/2018: Sally F. Travel agent in Waconia was looking for Agate Hunt field trips – the only thing that I could recommend is Moose Lake / Agate Days. (Theresa Tweet)
15. Scout Dens hoping to earn their "Earth Rock" Pins- 11/6/2018: Megan W. Presentation information. (Theresa Tweet)
16. GSM Membership - 10/31/2018: Brian P – Inquired about membership to the GSM. (David Wilhelm)
17. Rock Identification - 10/24/2018: Jill L. (Theresa Tweet)
18. Group Tours / Agates - Sally F - 11/12/2018 - - Information about group tours to find agates, I had no information to share with her. (Theresa Tweet)
19. Rock Identification - Justin O - 11/13/2018 - - . (Theresa Tweet)
20. Scout Dens hoping to earn their "Earth Rock" Pins - 11/1/2018: Eric A – “Return Customer,” Presentation to two (2) Cub Scout / Boy Scout Troops. In fact, Eric held two presentations to advance two groups of Scout in their Geology Badge 2019. (Theresa Tweet)
21. Geothermal green house in Somalia - 10/22/2018 – Sean V stated that he was in the early stages of designing and building a geothermal aquaponics and drip irrigation farm in Somalia. I could find no information on him. Theresa did a follow-up after finding his name and Harvey suggested that he should be looking for an engineer. (Dr. Thorleifson)
22. Layers of Rock – Connelly - 10/22/2018: – Connelly represented a group of students who are doing a project on the different layers of rock formed at Minnehaha Falls. (Justin Tweet)
23. Rock Identification – Sarah P - 10/29/2018:. (Theresa Tweet)
24. Esker in Golden Valley – Mary B – 10/13/2018: – In 2015, someone at GSM sent an email with an aerial photo of an esker in Golden Valley. Now I have a couple of people interested in exploring it, Mary wanted more information as to where it was located. (Dave Wilhelm)
25. Membership - Kirstin van den B - 9/20/2018: Looking to purchase a membership for her brother for Christmas - is he already a member? (David Wilhelm)
26. Annual Watts – Roger W - 9/17/2018: . Wanting to know if it was too late to join us for our Annual Banquet. (David Wilhelm)
27. Classroom Visit - Lis C - 9/13/2018: . (Theresa Tweet)

28. Agates - Jo Ann A - 9/5/2018: Jo Ann wanted a classroom presentation specifically on the identification of agates, and was also planning a field-trip to Lake Superior to look for agates. Set the classroom visit aside until better weather. (Theresa Tweet)
29. High School Resources - Jeff S - 9/4/2018:— Jeff is designing a geology unit as part of his curriculum. (Randy Strobel)
30. GSM Location Visit – Susan T - 8/24/2018: Wanting to visit the GSM Location. (Theresa Tweet)
31. Classroom Visit – Erica O’Hara – (originally received on 8/24/2018) – Followed up on 1/23/2019, reerica.ohara@moundsviewschools.org - Wishing a classroom visit, have not yet heard back from students as to their availability. (Theresa Tweet)
32. Classroom visit - Rachael L - 8/14 - 9/21/2018: Wishing a classroom visit, unfortunately, she wanted to schedule a visit before the students had their schedules. (Theresa Tweet)
33. Rock Identification- Anne L -8/10/2008: – Anne needed help in to identify Ore Samples that could potentially be hazardous (part of her father’s estate collection). (Dr. Thorleifson)

Attachment J
GSM 2019 MESTA Conference
Submitted by Theresa

2019 MESTA Conference

Submitted by Theresa Tweet

On February 1st, 2019, the 33rd Annual Minnesota Earth Science Teachers Association (MESTA) Conference was held at the District 287 Conference Center. Science teachers from around the greater Twin Cities area came together to hear professionals in the earth sciences talk about their field of study.

The event began Thursday evening with the chance to view the cosmos at the newly updated Como Planetarium. This year’s keynote speaker was “Annette S. Lee, an astronomer, professional visual artist and the Director of Native Skywatchers (NSW), an interdisciplinary and intercultural community-based research and programming initiative, with three decades of experience in education as a teacher and educational leader and program administrator, and researcher. The breakout sessions were on “Skywarn Storm Spotting and Severe Weather presented by Jarrod Schoenecker, President of the Twin Cities Meteorological Society, Metro Skywarn Trainer and Board Member. The talk on Bedrock Geology and Hydrological Challenges of Southeast Minnesota was given by Julia Steenberg, Minnesota Geological Survey. Authentic Learning and Assessment, was presented by Haley Kalina, Alexandria Public Schools and Dana Smith, Nicollet Public Schools, and the Story Maps talk was done by Jacqueline Hamilton, Minnesota Geological Survey and Matt Winbigler, Cloquet Public Schools.”

The Geological Society of Minnesota has been privileged to be a part of this event for many years providing; information on the organization, pamphlets, and rock boxes as donations for the drawing that is held at the end of the conference.

Those of you who are in the field of education can check out the MESTA web-page containing the above listed event, as well as past MESTA Conferences at: <https://mnearthscience.weebly.com/2019-mesta-conference.html>, then mark your calendars for the first Friday in February for the 2020 MESTA Conference and sign up!

On-hand for this year’s Conference was event organizer, Kate Rosok, Steve Erickson of the GSM (thank you Steve!), Keith Zilinski of the Minnesota Mineral Club, and a good number of teachers, vendors, and other interesting people.

Attachment K
GSM Holiday Celebration February
Submitted by Theresa
GSM Holiday Celebration, 2018

When writing about GSM's Annual Holiday Celebration, the exact guest count doesn't really matter because there are always a lot of people (members and non-members alike) who make themselves at home at Ed and Sandy Steffner's house one night a year for a good, old-fashioned Holiday gathering. To many of us, being able to relax and enjoy the company of other group members in such an inviting atmosphere is a real kindness during such a busy season – thank you Ed and Sandy! Please enjoy these pictures taken at the December 8, 2018, Holiday Celebration.

Respectfully Submitted
Dave Kelso
GSM Secretary