

# Michigan Geological Survey Report 16 from the K-12 Outreach Director, Peter Voice May 29, 2015

## New Items:

1. April 15<sup>th</sup> – report 15 presented to the director of the Michigan Geological Survey, John Yellich
2. April 16<sup>th</sup> – worked on scheduling CoreKids staff for upcoming April-early June events
3. April 16<sup>th</sup> – exchanged emails with Donna Seibert and Jerry VanNocker (KGMS) with regard to the school day component of the KGMS 2015 annual show – requested information on set-up time and hours of operation. Discussed with Bill Mitchell to arrange KGMS's use of the MGRRE stratigraphic record display for the show.
4. April 17<sup>th</sup> – exchanged emails with Robin St. Arnauld about a potential donation from Moorsbridge elementary to the CoreKids program to cover some of the students' time during the upcoming CoreKids events at that school.
5. April 17<sup>th</sup>-20<sup>th</sup> – exchanged emails with Laura Cross and Kathy Larsen about Kalamazoo AirZoo-CoreKids partnership – we will set up a meeting in June to discuss further collaborations
6. April 21<sup>st</sup> – exchanged emails with Ann Najera (North Hill Elementary) about logistics of their mid-May CoreKids event.
7. April 22<sup>nd</sup> – Scheduled CoreKids event with Mi Department of Environmental Quality. Earth Day event. CoreKids sent four staff members and a variety of Michigan rocks and fossils to the event.
8. April 22<sup>nd</sup> – Linda Harrison forwarded to me a contact form from Jodie Romzek (Director of Education, BaySail – Appledore Tall Ships) who had seen our exhibit at the DEQ Earth Day. She was requesting a set of core pumps. I replied to her email that we were no longer making core pumps for sale and provided her with information about borrowing a set of pumps or having CoreKids staff bring pumps to a joint event.
  - a. After checking with the CoreKids staff, I realized that the core pumps were not part of our display – the only way she could have seen them at the DEQ event was if she stopped at the Michigan Basin Geological Society Booth. I forwarded her email to Mark Nida and Mark Wollensak.
  - b. Mark Wollensak responded to her as well – they do not provide core pumps at cost either.
9. April 22<sup>nd</sup> – Meeting with John Yellich, Al Kehew, Bill and Linda Harrison, Sita Karki and Kyle Chouinard to discuss the MDEQ Groundwater Strategy proposal.
10. April 22<sup>nd</sup> – sent report 15 to Sita Karki and asked her to update the CoreKids website with the new map and to add the link for report 15 to the list of reports.

11. April 23<sup>rd</sup>-24<sup>th</sup> – worked with Robin St. Arnaud (Moorsbridge Elementary) to put together an invoice so they can donate funds to the corekids program
12. April 27<sup>th</sup> – scheduling meeting with corekids staff – went over planning the schedule for the KGMS event.
13. April 27<sup>th</sup> – received receipt from Moorsbridge Elementary for their contribution to the CoreKids program.
14. April 28<sup>th</sup> – exchanged emails with Linda Dull (Branch Co. District Library system) about scheduling summer events – she requested information about possible times.
15. April 29<sup>th</sup> – exchanged emails with Brittany Burgess (U of M Museum of Natural History) – she wanted to organize a joint event for May 6<sup>th</sup>. I was able to find staff to send on that date. 2 sessions – using the MI. Geol. History Module.
16. April 30<sup>th</sup> – exchanged emails with Linda Dull (Branch Co. District Library System) about scheduling events – she would like visits to three Branch Co. District Library branches on July 23<sup>rd</sup>. 1. 12:30 pm Union City; 3:00 pm Sherwood; and 6:00 pm Coldwater. The module at all three events would be Michigan Fossils.
17. April 30<sup>th</sup> – exchanged emails and telephone calls with Kellie Kanicki (Bangor West Elementary, Bay City) to try to schedule a CoreKids event – tentatively scheduled for May 21<sup>st</sup>. Cameron Manche will work on scheduling the event in my absence for the WMU Geology Club trip.
18. April 30<sup>th</sup> – met with Cameron Manche to discuss logistics of running CoreKids while I am on the WMU Geology club trip.
19. April 30<sup>th</sup> – Brittany Burgess (U of M Museum of Natural History) – confirmed with me and Cameron the upcoming event on May 6<sup>th</sup>.
20. May 6<sup>th</sup> – scheduled visit, U of M Museum of Natural History – 103 students. MI Geol. Resources module.
21. May 13<sup>th</sup> – developed powerpoint presentation for the Hydraulic Fracturing Model presentation for NC GSA. Bill Harrison reviewed the powerpoint.
22. May 13<sup>th</sup> – replied to forwarded email from Carla Koretsky. Message was from Hannah Kelly, Director Gilden Woods Early Childcare and Preschool about possible visits to WmU Geology labs. I sent Hannah information about the Corekids program.
23. May 13<sup>th</sup> – emailed Carla Koretsky with some ideas about expanding the CoreKids program – I will try to meet with her in June.
24. May 13<sup>th</sup> – event at North Hill Elementary canceled due to staffing problem. Working on rescheduling the event.
25. May 14<sup>th</sup> – received donation check from North Hill Elementary School for \$200.00.
26. May 14<sup>th</sup> – exchanged emails with Jason Dunn (Discover Elementary, Kentwood) about possible events – suggested Fall events. He also confirmed the number of participants from our February event with their school.

27. May 14<sup>th</sup> – exchanged emails with Brittany Burgess (U of M Museum of Natural History) requesting feedback from our joint event on May 6<sup>th</sup>.
28. May 14<sup>th</sup> – met with Heather Petcovic to discuss our two presentations at NC GSA.
29. May 19<sup>th</sup> and 20<sup>th</sup> – activities at North Central Geological Society of America section meeting at Madison, WI
  - a. Heather Petcovic presented a talk on lessons learned from teachers workshops for developing the MGRRE Portal (Involving Stakeholders in Developing Web-based Outreach Resources: An Example from the MGRRE Education Portal)
  - b. Peter Voice presented a talk on the Hydraulic fracturing Model (A Demonstration Model of Hydraulic Fracturing: Hands-on Analog to Fracturing Shale)
  - c. Peter Voice co-chaired the GO-MPS session – Thinking outside the Display Case: Innovative Geological Outreach at Museums, Parks and Surveys
  - d. Discussions with Lisa Anderson (Illinois Geological Survey) – led to decision to jointly co-chair the GO-MPS session at NCGSA in 2016.
  - e. Discussions with Carol McCartney (Wisconsin Geological Survey) – discussed different aspects of our outreach programs as well as some of the programs that they have started using UGS core repository funds.
  - f. Discussions with Joanne Klussendorf (Weis Earth Science Museum) about activities for enrichment of blind/seeing-impaired people at Museums.
30. May 20<sup>th</sup> – May 23<sup>rd</sup> – continued to work on rescheduling the North Hill Elementary school event – waiting on confirmation from teacher.
31. May 22<sup>nd</sup> – forwarded brief biographical sketch to John Yellich for one of his proposals.
32. May 25<sup>th</sup> – started working on the CoreKids annual report.
33. May 25<sup>th</sup> – received update from Jerry Van Nocker (Kalamazoo Geological and Mineral Society) on the KGMS annual show ticket sales. They had 4,006 participants this year.
34. May 26<sup>th</sup> – finished Annual report with revisions from John Yellich - Breanne Lejeune uploaded a copy to the CoreKids website.
35. May 26<sup>th</sup> – finished a report of activities at North Central GSA meeting and provided report to the Harrisons, Yellich and Sultan for review.
36. May 26<sup>th</sup> – discussed via email with Heather Petcovic the possibility of recycling part of our hydraulic fracturing module talk for the upcoming MESTA conference in the fall.
37. May 26<sup>th</sup> – fielded several emails from WMU graduate students about possibility of working for CoreKids in the late summer and fall.
38. May 26<sup>th</sup> – emailed Suzanne Lutwick about new annual report and discussed some pending proposals that we are working on.
39. May 27<sup>th</sup> – exchanged emails with Hannah Kelly (Gilden Woods Early Care and Preschool) – discussed possible event for her group in August – I asked her a few logistics questions to help with figuring out whether an event was feasible or not.

# Current Totals (July 1, 2014 to July 1, 2015)

Scheduled School Visits	2342
Branch Co. Library System	234
U of M Museum of Natural History	602
Kalamazoo Air Zoo	25
College Groups	53
MESTA Conference	37
MBGS Sept. 11 meeting	50
Cranbrook Institute of Science Rouge River Water Festival	108
MMS Annual Show (School Day)	2454
MSU National Fossil Day [note waiting on metrics information – value approximate]	400
Central Michigan Annual Show	979
KGMS Meeting	43
WMU Foundation Event Bronson	20
Gull Lake Sparks Series Event [note waiting on metrics information – value approximate]	9000?
Grosse Point North Fossil Day	200
WMU STEM-ulating Career Day	56
Southwood Elementary Science Fair	400
Other	20
DEQ Earth Day	2300
KGMS Annual Show	4,006
<b><u>Total</u></b>	<b><u>23,329</u></b>

## Projected Totals of Upcoming Events

Scheduled School Visits	200
<b><u>Total Projected:</u></b>	

a. **Past Outreach Events, July 1<sup>st</sup>, 2014 and on**

- i. July 3<sup>rd</sup> – University of Michigan Museum of Natural History Summer Camp
- ii. July 8<sup>th</sup> – Kalamazoo Air Zoo Eco Explorers Camp – on main campus [Michigan Geologic Resources and the Sandbox]
- iii. July 9<sup>th</sup> – Coldwater Branch, Branch Co. District Library [Natural Hazards: Volcanoes Module]
- iv. July 10<sup>th</sup> – Bronson Branch, Branch Co. District Library [Natural Hazards: Volcanoes Module]
- v. July 10<sup>th</sup> Sherwood Branch, Branch Co. District Library [Natural Hazards: Volcanoes Module]
- vi. July 11<sup>th</sup> – Union branch, Branch Co. District Library [Natural Hazards: Earthquakes Module]
- vii. July 16<sup>th</sup> – Kalamazoo Air Zoo Eco Explorers Camp – at Air Zoo
- viii. July 17<sup>th</sup> – Coldwater Branch, Branch Co. District Library [Natural Hazards: Earthquakes Module]
- ix. August 6<sup>th</sup> – Hydrogeology Field Camp MGRRE Tour
- x. Aug. 12<sup>th</sup>- University of Michigan Museum of Natural History Summer Camp
- xi. Aug. 14<sup>th</sup> –Aug. 16<sup>th</sup> – Michigan Earth Science Teachers Association Annual Meeting
- xii. Sept. 11<sup>th</sup> – M.B.G.S. Monthly meeting at MGRRE.
- xiii. Sept. 12<sup>th</sup> – The Cranbrook Institute of Science Rouge River Water Festival
- xiv. Oct. 10-12. Michigan Mineralogical Society Annual Show
- xv. Oct. 14: Classroom visit by K.G.M.S. President using CoreKids Core Pumps; Star Elementary School, Plainwell MI
- xvi. Oct. 18: MSU/MESTA joint National Fossil Day Event
- xvii. Oct. 23. Gobles Elementary School Science/Job Fair
- xviii. Oct. 24<sup>th</sup> – school day visit, Central Michigan 49<sup>th</sup> annual Rock Show
- xix. Nov. 4. K.G.M.S. Club Meeting at MGRRE
- xx. Nov. 7<sup>th</sup> – Friendship Village, Bronson
- xxi. Nov. 7-8. Gull Lake Community Schools Foundation – Sparks Series, Science and Engineering Fair.
- xxii. Nov. 19: U-M, Museum of Natural History Geology Day
- xxiii. Nov. 21<sup>st</sup> – Grosse Pointe High School Fossil Day
- xxiv. Dec. 5<sup>th</sup> – Greater Heights Academy [MI Geologic History Module]
- xxv. Dec. 5<sup>th</sup> – Southwood Elementary (Kentwood, MI) [MI Geologic History Module with emphasis on Fossils]
- xxvi. Dec. 10<sup>th</sup> – Western Middle School (Fossil Module)
- xxvii. Jan. 5th and 6th – Vicksburg Middle School (6th grade -- Fossil Module)

- xxviii. Jan. 12th and 16th – Gull Lake Middle School (6-7th grade – Module TBD)
- xxix. Jan. 13th and 14th – Vicksburg Middle School (8th grade – Earthquakes Module)
- xxx. Jan. 15th – Plainwell Middle School (6th grade – MGRRE tour + modified Michigan Geologic History Module)
- xxxi. Jan. 17 – WMU STEM-ulating career day
- xxxii. Jan. 21st -- EF Rittmueller Middle School (6th grade – MI Geologic History, 7th grade – Climate Change)
- xxxiii. Jan. 28<sup>th</sup> – Western Middle School (Earthquake Module)
- xxxiv. Feb. 3<sup>rd</sup> – Morley Stanwood Middle School (6<sup>th</sup> grade – MI Geologic History)
- xxxv. Feb. 9<sup>th</sup> – Walden Green Montessori School (Middle School – MI Geological History)
- xxxvi. Feb. 12-13<sup>th</sup> – Berkshire Middle School
- xxxvii. Feb. 12<sup>th</sup> – STEM Night, Southwood Elementary School
- xxxviii. Feb. 19<sup>th</sup> – Discover Elementary School (Kentwood – MI Geological History Module)
- xxxix. Feb. 20<sup>th</sup> and 27<sup>th</sup> – Gull Lake Middle School (Earthquakes Module)
  - xl. March 4<sup>th</sup> – Washington Writers Academy Family Literacy Night (modified MI Geologic History Module)
  - xli. March 17<sup>th</sup> – U-M, Museum of Natural History Geology Day
  - xlii. March 18<sup>th</sup> - U-M, Museum of Natural History Geology Day
  - xliii. March 18<sup>th</sup> – North Hill Elementary, Rochester, MI (MI Fossils Module)
  - xliv. March 18<sup>th</sup> – Mattawan Middle School (modified Michigan Geologic History Module)
  - xlv. March 23<sup>rd</sup> and 24<sup>th</sup> – Western Middle School (Hydrogeology Module)
  - xlvi. March 24<sup>th</sup> – Cub Scout Troop (MGRRE tour and Michigan Geologic History Module)
  - xlvii. Apr. 22<sup>nd</sup> – DEQ Earth Day Event
  - xlviii. May 1<sup>st</sup> -3<sup>rd</sup> – KGMS Annual Show.
  - xlix. May 6<sup>th</sup> – U of M Museum of Natural History (MI Geologic History Module)

## **b. Upcoming Events**

- i. June 1<sup>st</sup> or 2<sup>nd</sup> – Moorsbridge Elementary School (modified Michigan Geologic History).
- ii. June 10<sup>th</sup> – North Hill Elementary School, Rochester, MI (MI Geological History Module) – working on rescheduling
- iii. July 9<sup>th</sup> – Kalamazoo Air Zoo – Campus visit
- iv. July 23<sup>rd</sup> – Branch Co Library events

## Distribution of Scheduled School Visits and MGRRE Tours

