

Michigan Geological Survey Report 11 from the K-12 Outreach Director, Peter Voice [Aug. 18, 2014]

New Items:

1. May 23rd: Presented Report 10 to the Survey Committee
2. May 23rd: Met with Mohamed Sultan (Geosciences) and Jennifer Callahan and Suzanne Lutwick (WMU Foundation) to discuss funding opportunities
 - a. The Toshiba Foundation proposal was rejected
 - b. Looking for a different angle with the Dow Corning proposal – perhaps to set up the CoreKids satellite at Delta College
 - c. Setting up time with Waste Management Staff with John Yellich to discuss submitting to W.M. Foundation
 - d. Work with Linda Harrison on API proposal and identifying a person at Marathon that we can use as a sponsor to their foundation.
 - e. Tentatively meeting with Suzanne Lutwick next week to discuss some other smaller foundations.
 - f. Also Suzanne Lutwick suggested that we develop metrics that examine the learning outcomes for the students at our in-classroom visits.
3. May 23rd: Received additional responses to the MGRRE Online Portal Workshop II from Mark Klawiter (will attend) and Matthew Baleja (will not attend).
4. May 22-23rd: Thornapple Kellogg Middle School – had 240 students doing the Natural Hazards: Earthquakes Module.
5. May 23rd: Met with Dawn Caldwell and Cameron Manche to discuss next Tuesday's events – organized the materials for both groups. I also sent introductions to the teachers that they will be working with.
6. May 23rd: Contacted Andrea Bair (Delta College) to discuss possible funding for a CoreKids satellite in the Midland-Bay City-Saginaw area.
7. May 25th: Kalamazoo Geological and Mineralogical Society Field Trip to Grand Ledge. 6 participants from the society and 1 student participant. Very well received.
8. May 27th: Received notification from Bill Dinklemann that he will attend the MGRRE Portal Workshop II.
9. May 27th: Updated the CoreKids Metrics Binder
10. May 27th: Andrea Bair (Delta College) replied to my email, we will set up a time to discuss the possibility of submitting a proposal to Dow's Foundation to support a CoreKids satellite.
11. May 27th: Scheduled School Visit – Polk elementary School, Dearborn Heights. Michigan Geologic History Module. 134 students and 5 teachers. 3rd grade.

12. May 27th: Scheduled School Visit – Auburn Elementary School, Auburn Hills. Michigan Fossils Module. 76 students and 1 teacher.
13. May 28th: Met with Heather Petcovic to discuss last minute details for the workshop. She will have one of her students put together the workbooks for the workshop.
14. May 29th: Worked on preparing the MGRRE Ed. Room for the workshop. Set up the materials necessary for the examining the core.
15. May 29th: Scheduled meeting with Suzanne Lutwick to discuss additional funding possibilities for June 2nd at MGRRE.
16. May 29th – Scheduled School visit to the Science Night at El Sol Elementary School. [Michigan Geologic History Module with elements of the Michigan Fossils Module]. Still waiting to hear back on the totals for the event. El Sol Elementary School is a bilingual school and it was CoreKids first experience with trying to translate our content into Spanish. 150 participants.
17. May 29th – Tentatively scheduled a CoreKids staff meeting for Thursday June 5 to discuss staffing for upcoming events.
18. May 30th – MGRRE Online Education Portal Workshop II – 9 teachers participated in the workshop. We developed ideas towards a classroom activity based around a core.
19. June 2nd – Scheduled School Visit – Moorsbridge Elementary School [Michigan Geologic Resources Module]. 100 students and 4 teachers.
20. June 2nd – Worked on a revised budget for the Summer CoreKids Events
21. June 2nd – Worked on a draft general proposal statement that Suzanne Lutwick had created for various foundation requests.
22. June 2nd – Met with Suzanne Lutwick (WMU Foundation) and Linda Harrison – we discussed potential Foundations and Corporate Sponsorship of CoreKids
 - a. I am going to generate proposed sponsorship levels
 - b. Working on a draft letter with Suzanne.
23. June 3rd - June 2nd – Scheduled School Visit – Moorsbridge Elementary School [Visit to Van Buren State Park to look at Sand Dunes]. 100 students and 4 teachers.
24. June 3rd – exchanged emails with John Yellich and Suzanne Lutwick with regard to different funding options.
25. June 3rd – exchanged emails with Laura Cross (Kalamazoo Air Zoo) to discuss upcoming events – planning on chatting with her June 4th.
26. June 3rd – exchanged emails with Brittany Chunn (University of Michigan Museum of Natural History) about upcoming events – working on logistics of our first partnered summer camps.

27. June 4th – Bill Harrison and I ran an introduction to dolomite reservoirs in the Dundee Formation for a group of student interns (Baker-Hughes) at MGRRE. 4 interns and 1 staff member from Baker Hughes attended.
28. June 5th – Kathy Wright forwarded me an email from Mary Magos (Paragon Academy, Jackson) inquiring about field trips for Middle Schoolers. I sent her a brief description of our program and the brochures describing the modules.
29. June 5th Brittany Chunn (University of Michigan Museum of Natural History) sent me more logistics information.
30. June 5th – contacted Linda Dull (Branch Co. District Library) to confirm the slate of events that CoreKids has scheduled with the library system over June and July.
31. June 5th – worked out some of the logistics details with Kathy Wright with regard to last week's Teachers Workshop.
32. June 5th – contacted Dr. Pnina Ari-Gur (WMU College of Engineering) about her Summer Camp schedule. Tentatively scheduled a tour of the MGRRE facility for some time on June 23rd or perhaps June 24th. Later in day – Pnina contacted me and we have set the date for June 23rd from 1:15 to 4:00 pm. MGRRE tour and Michigan Geologic History Module.
33. June 5th – met with the CoreKids staff to schedule staff for upcoming events.
34. June 6th – Left a message for Laura Cross (Kalamazoo Air Zoo) about upcoming events with their program.
35. June 6th – Updated the CoreKids Binder and various metrics.
 - a. Developed a draft map of CoreKids school contacts for 2012-2013 and 2013-2014.
36. June 6th – contacted Sita Karki to attempt to schedule a meeting to discuss the CoreKids website and making my draft map into something more professional.
 - a. Scheduled meeting for June 9 at 10:00 am.
37. June 9th – worked on a recommendation letter for Steve Barone.
38. June 9th – met with Sita Karki to discuss the CoreKids Website – working on making sure she has access to the files.
39. June 9th – Suzanne Lutwick informed me that she had submitted a proposal to Devon Energy Foundation for CoreKids – proposal for \$25,000.
40. June 9th – Ardis Herrold (Grosse Pointe North Highschool) contacted me about the MESTA Annual Conference – they still have presentation slots available and she encouraged me to submit a presenter form to the conference.
41. June 9th – Wrote a draft abstract on the Hydraulic fracturing model for the MESTA conference and sent it to Heather and Ann for comments. Heather Petcovic added some edits. I returned the completed presenter form to the MESTA President, Chris DeWolf. Abstract is attached to this report.

42. June 9th – contacted Zakk Waber and Jessica Szkody to inform them that I had received a batch of thank you letters from their recent event at Polk Elementary School in Dearborn Heights.
43. June 9th – I worked on a document that generated sponsorship levels for CoreKids events as part of a new package of materials to use in fund-raising.
 - a. Developed a summary table of upcoming fall and spring corekids events
 - b. Developed a summary table for the CoreKids modules
44. June 9th – Received Workshop II summary from Heather Petcovic for comment. I made a few edits and returned the document to her.
 - a. We are looking at options to present the information generated by the two workshops – as this is a requirement of the initial seed grant.
45. June 9th – Tom Howe forwarded me the contact information for Jay Kim who would like to volunteer with our outreach program as well as requested support for a workshop at the Kalamazoo Valley Museum. Bill Harrison and I are going to invite him to MGRRE to discuss his request and possible collaboration.
46. June 10th – Received a thank you letter from Todd Heerlyn (Moorsbridge Elementary School) thanking CoreKids and specifically Dawn Caldwell and Zakk Waber for their recent visit to the school.
47. June 10th – Sita Karki sent me a draft version of the School Visits map that I had requested from her. It looked great, so I have added it to our promotional materials.
48. June 10th – I forwarded the CoreKids map to Suzanne Lutwick, Mohamed Sultan and John Yellich for comments.
49. June 10th – I responded to an email from Brittany Chunn (U. of M. Museum of Natural History) about our upcoming events – I clarified a few logistics points.
50. June 10th – Laura Cross called me and we discussed the logistics and event planning for the July 8th and 16th events.
51. June 11th – met with the U. of M. AAPG Student chapter and WMU AAPG Student chapter with Bill Harrison and Dave Barnes. 13 participants total. Co-led tour with Bill Harrison of MGRRE facility.
52. June 11th – Met briefly with Ann Gilchrist to discuss upcoming events and her degree of participation in the CoreKids program this summer.
53. June 12th – Heather Petcovic received permission to extend the deadline of our WMU Interdisciplinary Fund award for 2 months. This will allow us to present a second presentation at the MESTA conference based on the MGRRE Online Education Portal.
 - a. We discussed logistics of the presentation via phone and email.
 - b. I sent back suggestions and edits on the abstract to Heather Petcovic.

54. June 13th – Allison Van Driescche (Bay City Schools District) contacted me about the possibility of a fall CoreKids visit to her school (6th Honors Science and Regular Science – 4 sections). I took her contact information and added it to my database of teachers contacts.
55. June 13th – Heather Petcovic submitted the second presentation form to the Michigan Earth Science Teachers Association Meeting this morning. This abstract is essentially a Workshop III event for the Portal.
 - a. Copy of abstract attached with this report.
56. June 13th – Dave Chapman (Okemos High School) contacted me about the possibility of collaboration – developing a lesson plan on karst in the northeastern portion of the lower peninsula. I will explore some of the publications and try to work out a game plan for the project.
57. June 13th - Joanne Kluessendorf (Director, Weis Earth Science Museum) contacted the group of Outreach coordinators that had developed at NC GSA 2014. She wished to solicit ideas for talks at the upcoming NC GSA in 2015 (Madison, WI) as well as come up with a group name. She is going to put together a proposal for a talks session on Public Outreach at Museums, Parks and Surveys.
58. June 14th – Attended the Water Wells Drillers shortcourse that John Yellich hosted.
59. June 14th and 15th – exchanged several emails with Dave Chapman on Michigan Devonian karst.
60. June 16th – Received an updated CoreKids school visits map from Sita Karki after discovering a couple of typos.
61. June 16th – forwarded the map for use to Mohamed Sultan, John Yellich and Suzanne Lutwick.
62. June 18th – Met briefly with Sita Karki to discuss the update of the CoreKids website.
63. June 18th – ran two events for the Branch Co. Library District. The early afternoon event was at the Quincy branch – 35 children and 10 adults were present. The late afternoon event was at the Algansee Branch – 5 children and 4 adults. Both events used the Natural Hazards: Volcanoes Module. The feedback form listed 63 people including 12 adults, so I used that number for the event total.
64. June 20th – I was contacted by Ann Najera about the possibility of CoreKids visiting her school in the fall. I replied that we were still searching for funding for next year and that I would notify all of our teacher contacts when we did obtain funding.
65. June 20th – I contacted Dr. Pnina Ari-Gur to make sure that we are still on for Monday's joint event for her summer camp visit to MGRRE.
66. June 23rd – Hosted Dr. Pnina Ari-Gur's Engineering summer camp for an afternoon session at the MGRRE facility. 12 students and 1 adult. We did a tour of the facility.

- Then used the Michigan Geologic History module followed by an activity based around polishing Petoskey stones.
67. June 24th – Dave Barnes had invited several Consumers Energy staff to discuss a potential joint study. While at the meeting, I had the opportunity to discuss the Consumers Energy Foundation with Craig Johnson. He is going to follow up on our discussion with Carolyn Bloodworth.
 68. June 24th – discussed potential of Consumers Energy Foundation with Mohamed Sultan as well as my future with the CoreKids program.
 69. June 26th – Contacted by Stacy Belson (Northwestern Middle School, Battle Creek) in response to her request to schedule a CoreKids event for next year.
 70. June 27th – Contacted Marlene Fluharty, Executive Director of the Americana Foundation. I presented a preliminary proposal for module development focused on Agriculture and Geology. If they are interested, we will submit a full proposal to the foundation. I suggested that CoreKids would develop modules based on Michigan Soils and on Fertilizers and Geology.
 71. June 27th – contacted Craig Johnson (Consumer's Energy) to discuss the Consumers Energy Foundation.
 72. June 27th – contacted Cameron Manche to make sure that he is still set to assist me with the July 3rd event at U of M's Museum of Natural History.
 73. June 30th – received a thank you letter from Dr. Pnina Ari-Gur for our involvement with her College of Engineering Summer Camp.
 74. June 30th – received a follow-up email from Craig Johnson (Consumer's Energy) encouraging me to contact Carolyn Bloodworth at the Consumer's Energy Foundation.
 75. June 30th – met with Mohamed Sultan, John Yellich, Bill and Linda Harrison to give a tour and introduction to the Survey to a prospective faculty member at WMU – Dr. Essam Heggy.
 76. June 30th – received notice from Chris DeWolf (Michigan Earth Science Teachers Association Meeting) that our abstract on the MGRRE Portal had been accepted and was already scheduled in their draft program.
 - a. I sent a reply to Chris DeWolf to ask about the status of our second abstract.
 - b. Chris DeWolf sent me a reply clarifying the schedule and asking if they could use the hydraulic fracturing Model as a back-up presentation for Thursday afternoon of the conference – which I readily agreed to.
 77. June 30th – received an email from Jerry VanNocker (Kalamazoo Geological and Mineral Society) about the K.G.M.S. Annual Show. He sent me the updated attendance totals based on ticket sales which were significantly higher than the total that had previously been given to me.

- a. Jerry reported that the ticket sales accounted for 3,840 tickets over Thursday-through Sunday – 542 more contacts than we had previously known about.
78. June 30th – received a reply from Marlene Fluhart (Americana Foundation) – while supportive of the proposal, she did not view it as a project that the Americana Foundation would support.
79. July 1st – Contacted Sita Karki to discuss additions to the CoreKids website.
80. July 1st – discussed potential foundations to ask for funds with Linda Harrison and Suzanne Lutwick.
81. July 1st – Updated the CoreKids Annual Report to reflect recent metrics.
82. July 1st – emailed Tom Howe to schedule an appointment to learn how to use the Department’s Sand box – topographic mapping display system.
83. July 1st – exchanged emails with Brittany Chunn (University of Michigan, Museum of Natural History) discussing some logistics issues with our upcoming joint event.
84. July 2nd – exchanged emails with several CoreKids staff members to make sure that we have all of next week’s events covered.
85. July 2nd – met with Tom Howe to discuss the operation of the sand box and to work out some logistics for next Tuesday’s event that will utilize it.
86. July 2nd – Discussed budget issues with Kathy Wright.
87. July 2nd – Heather Petcovic and I worked out details for lodging and transportation for the MESTA field Conference. She will have Kathy Wright work on the Travel Authorization.
88. July 2nd – wrote Steve Barone, a letter of Recommendation for Western Middle School, Parma.
89. July 3rd – Zakk Waber left a second evaluation form from the June 18th events with the Branch County Library System – this one from the Algansee Library. The other one was from the Quincy Library. This new evaluation sheet adds 13 more interactions to our totals.
90. July 3rd – the first joint program between the U of M Museum of Natural History and CoreKids was a success. We had 30 students and 7 adults work with the Michigan Geologic History Module. I also worked out some logistics issues for the second event in August.
91. July 4th – updated the CoreKids Metrics spreadsheets to reflect the new feedback from the Algansee Library Event.
92. July 7th – exchanged several emails with Chris DeWolf and David Chapman (MESTA) about the upcoming MESTA Field Conference.
93. July 7th – sent in my MESTA Field Conference Registration form and membership renewal.

94. July 7th – discussed upcoming corekids events with Kathy Wright with regard to travel authorizations, budget and logistics of on-campus events.
95. July 8th – Scheduled Corekids event with the Kalamazoo Air Zoo. 10 students and 4 adults participated. Did a walking tour of part of campus and the Geology Museum. Did activities from the Michigan Geologic Resources module. Then used the Sand box and talked about contour mapping.
96. July 9th – Joanne Klussendorf contacted the North-Central GSA Outreach listserv with a proposal for a session at next year's North-Central GSA for the GO-MPS group. She asked for feedback on the proposal.
97. July 9th – Linda Harrison requested the budget history for CoreKids and the Contact history for an annual report of the MGRRE facility. The two of us searched through the archived CoreKids documents and were able to put together the charts she needed.
 - a. Also assisted her with editing the MGRRE Report to the Provost.
98. July 9th – I contacted Suzanne Lutwick for assistance in generating the CoreKids Foundation Support records. She updated me on several WMU Foundation initiatives related to CoreKids – she will send me the sponsorship levels documents later this week to look over.
99. July 9th – Lisa Apfel (Cranbrook Institute of Science) contacted me about the Fall 2014 Rouge River Festival with regard to scheduling.
 - a. I sent a brief reply with a tentative confirmation that we would be willing to help out with the festival, but I have not actually filled out the formal registration form.
100. July 9th – Contacted Jay Kim in response to an earlier email. He is interested in assisting with the July 16th event. I contacted the students currently scheduled to run the event to let them know of the additional guest.
101. July 9th – Dawn Caldwell contacted me about today's event at the Coldwater Branch, of the Branch District Library. They had 75 students come to the event and she will give me the feedback form later in the week.
102. July 10th – Dawn Caldwell and Nick Panyard performed two visits to the Branch Co. district library system.
 - a. They went to the Sherwood Branch Library and had 4 students show up for the Volcanoes module.
 - b. They went to the Bronson Branch Library and had 40 students and 9 adults show up for the volcanoes module.
 - c. We discussed the upcoming visit to the Union Branch and what she and Nick needed in terms of supplies.

103. July 11th – I scheduled a meeting for Monday, July 14th with Suzanne Lutwick to discuss the CoreKids Sponsorship brochure and letter.
 - a. She also informed me that Devon had denied our request of funds from their foundation.
104. July 11th – sent email and left phone message for Laura Cross (Air Zoo) to discuss logistics for our next scheduled event with the Kalamazoo Air Zoo.
105. July 11th – Left a message with Carolyn Bloodworth's office at the Consumers Energy Foundation requesting an audience to discuss the CoreKids program with the foundation.
106. July 11th – Dawn Caldwell and Nick Panyard went to the Union Township Library (Branch Co.) and ran the Earthquake module. They had 8 children and 2 adults.
107. July 14th – Met with Suzanne Lutwick and Jason Long to discuss the Sponsorship levels brochure that the WMU Foundation had put together. I sent several requested documents/information to Jason Long for inclusion within the brochure.
108. July 15th – exchanged several emails with Jay Kim, Nick Panyard, Ann Gilchrist (CoreKids) and Laura Cross (Air Zoo) about logistics for the July 16th event.
109. July 16th – emailed Fred Shell (DTE Energy Foundation) a copy of our annual report and a selection of photographs illustrating CoreKids activities. I thanked him for the DTE Energy Foundation's support over the past 8 years.
110. July 16th – CoreKids participated in the second Eco-Explorers Summer camp – this time at the Air Zoo. They had 11 students participate. Our group provided an exercise on volcanoes and a second exercise on polishing Petoskey stones. Jay Kim shadowed the event to get a feel for CoreKids activities.
111. July 16th – emailed Linda Dull (Coldwater Branch, Branch Co. District Library), Cameron Manche and Zachary Waber to make sure logistics for the July 17th event are organized.
112. July 16th – Heather Petcovic invited me to take a look at materials that were going to be discarded from her Earth Science Teaching lab. I took a bucket (5-gallon) of pieces of Marble for give-away for the children at CoreKids events.
113. July 17th – CoreKids event at the Coldwater Branch, Branch Co. District Library. Performed the Natural Hazards: Earthquakes Module. 15 children and 5 adults.
114. July 22nd – Wrote four more letters of recommendation for Steve Barone.
115. July 22nd – emailed Cameron Manche and Zakk Waber about their event on July 17th – haven't received feedback or event totals from them yet.
116. July 22nd – received email from Jay Kim – thanking me for allowing him to shadow the July 16th event.

117. July 25th – received request from Eric Shafer (Waste Management) for information about the CoreKids program. I sent him a brochure and the annual report for 2013-2014.
118. July 28th – sent Steve Barone a general letter of recommendation for use with positions that he is applying for in the next couple of weeks.
119. July 28th – Replied to an email from Beth M. Beaudin-Seiler who is a research associate at the WMU College of Aviation. She has funding to develop activities for a “Mobile Aviation Science After School Program”. She has requested a meeting with me and Heather Petcovic.
120. July 28th – worked on the first draft of the API Grant proposal. Sent to Linda Harrison for comment.
121. July 29th – Discussed CoreKids budget and remaining balance of funds with Kathy Wright. Developed a plan to deal with some of our fall events with those monies.
122. July 29th – Sent Lisa Appel (Cranbrook Institute of Science) tentative confirmation that we would be able to attend the Rouge River Festival in September.
123. July 31st – Linda and Bill Harrison and I collected samples of Petoskey stones and other fossils at a quarry outside Petoskey, Mi. These samples are for the CoreKids program as give-away samples.
124. Aug. 4th – generated a report for the Director of the Survey with significant assistance from Linda Harrison on our activities this past weekend including discussion of collecting fossils for the CoreKids program.
125. Aug. 4th – received email with clarifying details about the Rouge River Festival from Lisa Appel (Cranbrook Institute of Science).
126. August 4th - Received several update emails from Heather Petcovic and her student colleagues about the upcoming MESTA Conference. I sent some information about logistics to Heather.
127. Aug. 4th – Tom Howe contacted me about the Hydrogeology Camp’s annual tour of the MGRRE facility. I have scheduled a tour for Wednesday August 6th at 1:00 pm.
128. Aug. 5th – Received notification from Heather Petcovic that the NSF DRK-12 proposal was declined. Discussion via email with Bill Harrison and Bill Cobern suggests that we need to see the evaluations before planning the next step.
129. Aug. 6th – met with Mohamed Sultan and Kathryn Wright to discuss the future of CoreKids, Voice’s funding and the program’s funding.
130. Aug. 6th – Gave MGRRE tour to the WMU Hydrogeology Field Camp.
 - a. 28 students, 2 instructors and 2 teaching assistants.
131. Aug. 6th – Suzanne Lutwick (WMU Foundation) contacted me, she is working on a proposal to submit to CSX and needed updated budget information for the CoreKids program.

132. Aug. 6th – I reached out to Jennifer Callahan and Suzanne Lutwick to discuss the possibility of starting an endowment for the CoreKids program. We are working to schedule a meeting to discuss the endowment with Mohamed Sultan.
133. Aug. 7th – I scheduled a meeting with Heather Petcovic and her student Andrew Bentley for Monday Aug. 11 to discuss the workshop at the upcoming MESTA meeting.
 - a. I also edited Andrew's first draft of a mock website for the MGRRE Portal and sent him feedback and images to use in the powerpoint.
134. Aug. 7th – received email from Jamie Bowman (Thornapple Kellogg Middle School) about the possibility of scheduling a CoreKids event. I have asked Jamie to send me the dates and what module they would like.
135. Aug. 8th – Linda Harrison and I finished editing the API proposal. Linda is going to submit it.
136. Aug. 8th – I worked with Andrew Bentley to prepare some fossil specimens for the MESTA conference. We also made some edits to the mock website he had developed for the MGRRE portal.
137. Aug. 9th – Steve Wilson (retired, MI DEQ) contacted me about the sad state of Michigan Geology information available on the web especially at sites like Wikipedia. I replied to his email and copied Bill Harrison on it.
 - a. Aug. 11th – discussed proposal with Bill Harrison and John Yellich
 - b. Aug. 11th – sent additional reply to Steve to discuss possibility of meeting in person to discuss these activities.
138. Aug. 11th – met with Beth M. Beaudin-Seiler (WMU College of Aviation) and Heather Petcovic to discuss Beth's recent grant. She wants to expand her project to secondary education with a possible theme of building an airport. She is pursuing funding and would like Heather and I to be involved if expanded funding comes into place. I encouraged her to reach out to the Kalamazoo Air Zoo.
139. Aug. 11th – met with Heather Petcovic and Andrew Bentley to discuss the materials we plan on giving to teachers at the MESTA meeting.
140. Aug. 11th – contacted Laura Cross (Kalamazoo Air Zoo) about the meeting with Beth Beaudin-Seiler. Also told her that we have limited funding for the Fall.
141. Aug. 11th – filled in evaluation form for Steve Barone for Ionia County School Consortium for their open High School Science teacher position.
142. Aug. 11th – Worked on editing Bill Harrison's draft statement on Outreach activities under the Michigan Oil and Gas Association.
143. Aug. 12th – Suzanne Lutwick (WMU Foundation) sent me the final version of the CoreKids Sponsorship brochure. John Yellich and Bill Harrison looked it over and I sent final approval to Suzanne.

144. Aug. 12th – John Yellich invited me to this Geologic Forum for Cooper Township. I attended the event and provided relevant feedback on K-12 outreach during our discussion of the strengths of MGRRE and the Survey.
145. Aug. 12th – CoreKids joint event with the U of M Museum of Natural History Summer Camp. 23 students. Volcanoes Module.
146. Aug. 13th – received email from Rebecca Freeman (KY Geol. Surv.) about construction of core pumps – I will get back to her when I return to Kalamazoo.
147. Aug. 13th-Aug. 15th – attended Michigan Earth Science Teachers Association Meeting
- a. 4 people attended our talk (Out of 37 people who registered for the conference).
 - b. We ended up laying our Core out in the dining hall and allowed people to come and look at our materials during lunch and the social period after lunch.
 - c. Spoke with Diane Crosley (Spring Arbor University) and Brian Bodenbender (Hope College) about the possibility of bringing their classes to visit MGRRE.
 - d. Spoke with Jason Hunter (Grand Haven Public Schools) about organizing a CoreKids event with his school.
 - i. Also spoke to him with Heather Petcovic about Steve Barone as a potential candidate for Grand Have Public Schools open Earth Science Teachers position.
 - e. Spoke with Dave Chapmen (Okemos High School) about a lesson plan he is working on (see earlier dates for email exchange about project). I will work on getting him the datasets that he is looking for by early September (Mostly wants formation tops of the Traverse Group at a number of localities)
148. Aug. 16th – Steve Barone contacted me to inform me that he had taken a position at Taylor Exemplar Academy, Taylor MI teaching physical science (7th grade) and earth science (8th grade).
149. Aug. 17th – I contacted Cris DeWolf (MESTA), Dave Chapman (Okemos High School and MESTA) and Danita Brandt (MSU) about the National Fossil Day events hosted at MSU on October 18th. I volunteered to help out with the event (which includes teachers workshops, a MESTA fossil sale, and a public Family Fossil Day.

Totals for July 1, 2013-July 1, 2014

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| Total Adult Interactions (As of July 2013: Chaperones and teachers at events) | 110 |
| WMU Hydrogeology Field Trip; CMU Petroleum Geology Class (College Students); Saudi Arabia Geological Survey Visit; WMU Geology Club, MBGS Meeting, Michigan Oil and Gas Association Meeting | 251 |
| Conferences (Teachers Associations, Teachers Workshop; Other Professional Groups) | 732 |
| K.G.M.S. Seminar Series, etc. | 3,885 |
| Cranbrook Institute Events (Rouge River Festival 2013, Fossil Festival, Earth Week Festival) | 5,220 |
| DEQ Earth Day Festival: | 2,300 |
| <u>Total:</u> | <u>16,175</u> |

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

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| Branch Co. Library System | 234 |
| U of M Museum of Paleontology | 36 |
| Kalamazoo Air Zoo | 25 |
| WMU Hydrogeology Field Camp MGRRE Tour | 32 |
| U of M Museum of Natural History | 23 |
| MESTA Conference | 37 |
| <u>Total</u> | <u>387</u> |

Projected Totals of Upcoming Events

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|--|-------------------|
| <u>Total Projected:</u> | <u>0</u> |
| <u>Total Projected + Actual</u> | <u>387</u> |

a. Past Outreach Events July 1st, 2013-July 1st, 2014 (During Voice Tenure as Director, K-12 Outreach)

- i. July 30th – Cub Scout Group, Kalamazoo MGRRE Tour
- ii. Aug. 5th – WMU Hydrogeology Camp MGRRE Tour
- iii. Aug. 22nd – Lego Robotics League MGRRE Tour (Natural Hazards – Impacts Module)
- iv. Sept. 11-13th – Cranbrook Institute of Science Rouge River Festival (Hydrogeology Module)

- v. Oct. 4-6th – Michigan Earth Science Teacher Association/Michigan Alliance of Environmental and Outdoor Educators Annual Meeting
- vi. Oct. 14th – Loaned Module to Kalamazoo Geological and Mineral Society for a School Visit – Star Elementary, Plainwell
- vii. Oct. 21st – Scheduled School Visit - St. Mary Visitation School, Bryon Center (Michigan Geologic History Module)
- viii. Oct. 25th – Petroleum Geology Class, Central Michigan University – MGRRE Tour
- ix. Oct. 30th – Kalamazoo Reformed Heritage Christian School MGRRE Tour
- x. Nov. 1st – MGRRE Online Education Portal Workshop
- xi. Nov. 1st - Okemos High School Geology Class MGRRE Tour
- xii. Nov. 5th – Saudi Arabia Geological Survey MGRRE Tour
- xiii. Nov. 11th – Scheduled School Visit, Upton Middle School, St. Joseph (Michigan Geologic History Module)
- xiv. Nov. 12th and 14th – Scheduled School Visit, Gull Lake Middle School (Michigan Geologic History Module)
- xv. Nov. 16th – Kalamazoo Geological and Mineral Society Lecture Series – MGRRE talk and tour
- xvi. Nov. 18th – Scheduled School Visit, St. Francis School of Ann Arbor (Michigan Geologic History Module)
- xvii. Nov. 20th – WMU Geology Club Tour
- xviii. Dec. 11th – Scheduled School Visit, St. Francis of Ann Arbor (Natural Hazards – Earthquakes Module)
- xix. Dec. 12th-13th- Scheduled School Visit, Upton Middle School, St. Joseph (Natural Hazards – Earthquakes Module)
- xx. Dec. 26th – Dec. 30th – Cranbrook Institute of Science Fossil Festival (Michigan Fossils Module)
- xxi. Dec. 30th – Kalamazoo Air Zoo Digging Michigan Camp (Michigan Fossils Module)
- xxii. January 18th – WMU STEMulating Career Day (Michigan Geologic History Module)
- xxiii. Jan. 21st – Scheduled School Visit, Gull Lake Middle School (Natural Hazards: Earthquakes Modules)
- xxiv. Jan. 22nd – Scheduled School Visit, Gull Lake Middle School (Natural Hazards: Earthquakes Module)
- xxv. Jan. 25th – Dr. Hampton borrowed CoreKids equipment for outreach event with a Webelos Scout Pack.
- xxvi. Feb. 8th – Kalamazoo Geological and Mineral Society Seminar Series (MGRRE)
- xxvii. Feb. 11th – Grand Haven Public Schools – MGRRE Tour
- xxviii. Feb. 14th – Scheduled School Visit, Berkshire Middle School
- xxix. Feb. 28th – Schedule School Vist, Gull Lake Middle School
- xxx. Mar. 3rd - Scheduled School Visit, Gull Lake Middle School
- xxxi. March 5th – Scheduled School Visit, Hastings Middle School
- xxxii. March 6th -8th -Michigan Science Teachers Association Annual Meeting

- xxxiii. March 17th – Scheduled School Visit, Mattawan Middle School (Tom Howe)
- xxxiv. March 18th – Scheduled School Visit, Okemos High School
- xxxv. March 19th -20th – Michigan Section of the Petroleum Technology Transfer Council Spring Meeting
- xxxvi. March 28th – Scheduled School Visit, Lake Shore High School
- xxxvii. April 1st – Scheduled School Visit, Northwestern Middle School, Battle Creek
- xxxviii. April 8th-11th – Cranbrook Earth Week Festival?
- xxxix. April 9th – Hydraulic Fracking Demo at MBS Meeting
 - xl. April 15th – Scheduled School Visit, Detroit Public Safety Academy [Hydrogeology Module]
 - xli. April 17th – Michigan Oil and Gas Association 12th Annual Michigan Petroleum Geology Conference
 - xlii. April 22nd -Michigan Dept. of Environmental Quality Earth Day Event
 - xliii. April 24th-25th -North-Central GSA Section Meeting
 - xliv. May 2nd –4th -Kalamazoo Geological and Mineral Society Annual Show
 - xlv. May 8th – Scheduled School Visit, Greater Heights Academy [Michigan Geologic History and Natural Hazards: Volcanoes Modules]
 - xlvi. May 12th-- Scheduled School Visit, Upton Middle School [Hydrogeology Module]
 - xlvii. May 13th – Scheduled School Visit, Upton Middle School [Hydrogeology Module]
 - xlviii. May 22nd – Scheduled School Visit, Thornapple Kellogg Middle School [Natural Hazards: Earthquakes Module]
 - xlix. May 23rd – scheduled School Visit, Thornapple Kellogg Middle School [Natural Hazards: Earthquakes Module]
 - I. May 24th – Kalamazoo Geological and Mineralogical Society Grand Ledge Field Trip
 - ii. May 27th – Scheduled School Visit, Auburn Elementary School [Michigan Fossils Module]
 - iii. May 27th – Scheduled School Visit, Polk Elementary School [Michigan Geologic History]
 - liii. May 29th – Science Night, El Sol Elementary [Modified Michigan Geologic History Module]
 - liv. May 30th – MGRRE Online Education Portal Workshop II
 - lv. June 2nd – Scheduled School Visit, Moorsbridge Elementary [Michigan Geologic History Module]
 - lvi. June 3rd – Scheduled School Field Trip, Moorsbridge Elementary – visit to Van Buren State Park.
 - lvii. June 4th – MGRRE Tour for the Baker Hughes Summer Interns
 - lviii. June 18th – Quincy Branch, Branch Co. District Library [Natural Hazards: Volcanoes Module]
 - lix. June 18th – Algansee Branch, Branch Co. District Library [Natural Hazards: Volcanoes Module]

- ix. June 23rd – College of Engineering Summer Camp [MGRRE Tour – Michigan Geologic Resources]

b. Past Outreach Events, July 1st, 2014 and on

- i. July 3rd – University of Michigan Museum of Natural History Summer Camp
- ii. July 8th – Kalamazoo Air Zoo Eco Explorers Camp – on main campus [Michigan Geologic Resources and the Sandbox]
- iii. July 9th – Coldwater Branch, Branch Co. District Library [Natural Hazards: Volcanoes Module]
- iv. July 10th – Bronson Branch, Branch Co. District Library [Natural Hazards: Volcanoes Module]
- v. July 10th Sherwood Branch, Branch Co. District Library [Natural Hazards: Volcanoes Module]
- vi. July 11th – Union branch, Branch Co. District Library [Natural Hazards: Earthquakes Module]
- vii. July 16th – Kalamazoo Air Zoo Eco Explorers Camp – at Air Zoo
- viii. July 17th – Coldwater Branch, Branch Co. District Library [Natural Hazards: Earthquakes Module]
- ix. August 6th – Hydrogeology Field Camp MGRRE Tour
- x. Aug. 12th - University of Michigan Museum of Natural History Summer Camp
- xi. Aug. 14th –Aug. 16th – Michigan Earth Science Teachers Association Annual Meeting

c. Upcoming Events

- i. Sept. 9-12. The Cranbrook Institute of Sciences Rouge River Festival
- ii. Oct. 10-12. Michigan Mineralogical Society Annual Show
- iii. Nov. 4. K.G.M.S. Club Meeting at MGRRE
- iv. Nov. 7-8. Gull Lake Community Schools Foundation – Sparks Series, Science and Engineering Fair.
- v. Nov. 8 Metropolitan Detroit Science Teachers Association Meeting
- vi. Nov. 19: U-M, Museum of Natural History Geology Day
- vii. March 18, 2015: U-M, Museum of Natural History Geology Day