



# AAPG

## Eastern Section

March 20, 2016

Dear ES-AAPG Member,

Greetings to all on this vernal equinox, 2016! It's so amazing to think that Spring is officially here and how quickly the time flies by once we enter a new year. And, in just 6 months we will all be in Lexington Kentucky for the [45th Annual Eastern Section AAPG Meeting](#).



The theme this year is “Basins to Barrels”, and the planning committee is busy at work, organizing yet another great and memorable meeting in the Bluegrass country of old Kentucky. In addition to great talks and poster presentations from all over the northeast, the meeting will include several informative short courses, exciting field trips and even Bourbon tasting events. I am confident that all of you will want to be part of this ‘can’t miss’ event, either as a presenter or participant. I want to encourage everyone to consider presenting either a paper or poster, pertaining to your specific area of work or expertise. Be a part of the excitement and present something that you have been working on that others would love to hear about. With the deadline in mid-May, you still have plenty of time to submit your abstract.

So in thinking about time and how it seems to evaporate into the past so quickly, I want to first reflect on the past, and then offer some thoughts about the future. Regarding the past, I am reminded of what is used to be like in the mid-1980s, BC (before computers). I was working for CNG Development Company in Pittsburgh, PA at the time, and it was announced one afternoon-I think it was a Friday-that all the geologists were soon going to be getting their own computers. I recall my first thought was something like “well that’s dumb, we have secretaries to type for us and besides, that thing is going to take up a lot of room sitting in the middle of my desk.”

Boy was I wrong.

Up to that point, all of my geologic work involved mostly paper maps, and cross sections, where all of the work was done by hand, with a pencil and lots of erasers. Each day there would be so much eraser dirt beneath my drafting table that I once thought about leaving a tip for the cleaning people. In those days we each had nice big offices to accommodate the many filing cabinets, rolled map racks, desk and



drafting tables that were a requirement for any geologist at that time. The process of creating a map involved many lengthy and somewhat tedious steps, including many trips back and forth to the log file room and to our drafting department.

But the process of creating any structure or isopach map always began with making lists of all wells with elogs, sample logs, or just drillers logs in your area of investigation, then painstakingly making visits to the log file room, very much like a library, to gather all of the needed raw materials. Well data was captured by hand and required going through the well ticket books, or well card files to scribble down oil or gas show and IP information. Logs were correlated and formation tops were marked on long tables, sliding one correlated log next to several others, looking for gamma ray similarities.

While doing all of this, there was plenty of time for creative thinking about possible depositional environments, and the subtle changes occurring from one well-log signature to the next based on that ever changing log response. Once correlated, topped, and marked for net sand and net pay cut-offs, the logs next needed to have all of that information captured on a paper spreadsheet. I remember that I liked the oversized light green accounting ledger paper the best, because it had all the space for extra columns needed for all the information to be penciled in by hand. Once formation tops were recorded, subsea values had to be calculated (oh, and we did have calculators by then) from known GL, DF or KB elevations depending what was supplied on the front of the well-log.

OK, let's stop there. At this point anyone still reading this who was born *after* that Friday in the mid-1980s is probably thinking "why in the world would anyone even care about any of this?" Suffice it to say, there were still at least as many more steps left to be done, as had been completed up to this point. The use of blue-line machines, mylar, velum, (popular with old friend and mentor of mine, Philip Martin) Leroy pens, and various thicknesses of thin black drafting tape used by our drafting department for contour lines, were all final steps in this lengthy ordeal.

Just to make a map.

So look where we are now. We have highly sophisticated well data management software to go with the well and log service companies who offer nearly instant downloads of whatever type and volume of data is needed. We have lightning speed gridding packages, with a wide range of algorithms from which to choose, tons of amazing software to aid in doing cross-sections, well log analysis and seismic interpretation. And not to mention all of the specialty software that is out there, depending on your specific area of geologic expertise.

So I say all this because even though the time it now takes to gather necessary control data to make a meaningful map has been reduced from weeks to hours or even minutes, there is still the same need for applying your geologic bias and knowledge to every map you make. There is still a need for doing literature searches, drawing from past core and outcrop work, and talking through ideas and concepts with other geoscientists. It seems like every task and step involved in creating a geologic map has been so streamlined that there is nowhere further that we can go. Perhaps one of you out there will come up with the next revolution in some workflow that will change things logarithmically again. Or perhaps there are better ways than using traditional maps to explore for and identify sweet spots in a given play. Only in your mind can this next big step be found and as we progress thru time.

This brings me around to my last (pewh!) topic for today.

All of us either have benefited from, or could have benefited from a strong early earth science education in grade school through high school. Many students entering college or the nation's workforce today have missed out on this crucial part of their education. For those who did miss out, they are lacking basic knowledge about the world around us. They may not consider geoscience as a career because they have not been exposed to it in high school and have not had the opportunity to share in the excitement of discovery that all of us in the geoscience community know so well. Those who miss this step are not prepared to make informed and intelligent choices when it comes to electing leaders or voting on issues concerning the natural world.

One way that the Eastern Section of the AAPG, as a scientific organization can help is thru the Earth Science Outreach Committee, or ESOP. This committee was established just before the turn of the 21<sup>st</sup> century (in 1999) in order to provide organization, resources and leadership to those who wish to spread the word about earth science to young people during their primary and secondary education experience. Below is the verbatim description found in our Article III, Section d. of our by-laws:

*“Educational Outreach Committee. The Educational Outreach Committee, known as the Earth Science Outreach Program, (ESOP), was incorporated as a separate, non-profit corporation, in the State of Delaware on June 17, 1999. ESOP's mission is to promote a better understanding and appreciation of the earth sciences, energy resources, and the environment among K-12 and college students and their teachers in the Eastern Section. The program will endeavor to provide small monetary grants to organizations and individuals that facilitate earth science awareness, and will undertake other activities that further the objectives of the Outreach Program. The Chair and subcommittee chairs will each have a term of five years. The subcommittees may include:*

*fund raising, outreach, communications and visiting lecturer. One of the subcommittee chairs may be designated as vice-chair of the Committee. The chair and subcommittee chairs will be appointed on a rotating basis by the Eastern Section President.”*

This is an extremely important committee and requires a person or persons with a passion for earth science education to serve as Chair or co-Chair. It's a long term commitment, but well worth the time and energy you will put into it. We need strong leadership in order to provide a resource framework within which members can draw from in this outreach effort. I know that there are many of you out there who, in one way or another, are already spreading your knowledge and passion for earth science to our youth in schools or your communities. Some of you visit classrooms several times each year, some volunteer to lead field trips or outings in order to raise student awareness of local geology. You are truly doing a great service to the future of our science and to the enrichment of all students who hear your voices. But we do need leadership to collect, catalogue and help spread good ideas. We need leadership to capture some of the methods and techniques used out there, so that they can be used by others. We need leadership to identify and collect slide presentations that can easily be used by anyone who might need such a resource to take into a classroom or community meeting.

So, with that said, if there is anyone still reading this who has an interest in taking a leadership role in this committee, please contact me, or any one of the Eastern Section officers via email and we'd be happy to discuss more about it with you.

While you are here, please browse around the website. It's all for you, and every week there is something new!

Enjoy the Spring!



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