

Meeting Agenda/Brief Recap and Updates  
8pm Monday November 4, 2013



Marion Township Library -Chickasaw, OH

1. **Jim Keller – Welcome, meeting purpose.**
2. **Marion Local FFA Students** – Madison Chrisman, Abby Fleck, Rose Homan, Heather Mescher and Michelle Schwieterman, FFA students from Marion Local presented a skit. They chose a scene from a coffee shop in Celina. In this congenial setting, two people spoke about the challenges farmers are incurring with the state nutrient restrictions, while two discussed the negative impact excess nutrients were having on lake properties and businesses. One student portrayed the waitress/moderator. The students had some good give and take and made some excellent points. Other than a break down or two in decorum the young ladies did a pretty good job.
3. **Tom Menke & Karen Chapman** – Karen was unable to attend. Tom advised the group of his role in local agriculture, being heavily involved in Ag consulting advising both local farmers and businesses. Tom spoke about studies that have closely followed nitrogen application rates to reveal the most profitable rates of application. Tom shared that Karen Chapman with the Environmental Defense Fund (EDF) has funding from the Ohio Corn Marketing Board. This funding will pay for trials to discern the most effective phosphorous application rates. Tom is looking for participants. They are especially looking for fields that have higher phosphorous counts such as 30-40 ppm or higher. The farmer's involvement would be minimal with all sampling and testing paid for by the Corn Marketing Board. All findings will be completely anonymous regarding its source. Anyone looking to get involved can call Tom Menke (937) 447-4225, email [tom@menkeconsulting.net](mailto:tom@menkeconsulting.net), Terry Mescher (419) 586-3289, email [terry.mescher@dnr.state.oh.us](mailto:terry.mescher@dnr.state.oh.us) or Glen Arnold (419) 235-4724 email [arnold.2@cfaes.osu.edu](mailto:arnold.2@cfaes.osu.edu).
4. **Mark Miller – LWR** Mark has talked a number of times with the president of Livestock Water Recycling (LWR), a Canadian company. Mark feels that their approach would work. Not sure how cost effective it would be over the long haul. They require huge volumes of fresh manure to operate effectively. They separate solids from liquids with a majority of the liquid resulting in drinkable water. LIA member Gene Marshall is also familiar with this company and is aware that they are installing their equipment at BioTown in Reynolds, IN. The unit is being installed there in conjunction with a plug-flow digester. Terry Mescher advised that if the cost to process swine manure reaches 3 – 4 cents per gallon it is more economical to transport the manure out of the watershed. Group felt that once the LWR unit is operating per expectations, we should send a contingent of folks over to check it out.

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5. **Bill Knapke – Ozonation** - Bill visited a swine farm where Mark Minnix is injecting ozone into an 8 ft deep swine pit. This results in a thicker layer of high nutrient solids at the bottom of the pit with low nutrient liquid at the top. Bill didn't feel that hog farmers could afford it since the cost for the system is very high. Mark plans on pumping the manure and performing detailed analysis which will provide insights into how the system is performing. The test site is owned by Dr. Dale Hendrickson an acquaintance of Bill's. Bill will continue to talk with him to get a better perspective of how effective and practical this approach might be.
6. **Terry Mescher, Bill Knapke, Bro Nick, Jim Keller & group**
  - **Status of \$50,000 grant – project is complete** – We sent an email on 10/31/2013 providing insights into the outcome of this project. A link to the Excel tool they developed was included.
  - **Separation Technologies** – Brief discussion about using belts to immediately remove the solids from under hogs. Since the majority of the nutrients are contained in the solids this approach has some appeal. Tom Menke and Terry Mescher both reported that some trials had been made as long as 13 years ago. Anecdotal evidence would reflect that the approach is not practical. **ElectroCell**, ElectroCell presented in our July meeting. They introduce a pulse into a pit which consolidates solids in the bottom and dramatically reduces odors. Getting a unit here for a test is currently prohibitively expensive so not sure if this technology will ever be tried in the watershed. **Pickett Enterprises** – Don Pickett attended the meeting and advised that he has a custom formulation that creates an environment in the lake that is unfavorable for algae to grow even in the presence of phosphorous. He also has a technology that floats nutrient laden solids to the top. It also reduces odors and renders phosphorous more plant available. Don advised that all his products are biodegradable, non-toxic, and non hazardous. Don has a jar of local manure on which he is running tests. Based on the outcome, we might need a local farmer to do a trial in his pit.
  - **Glen Arnold test plots** – Glen had 15 manure plots running this summer. 7 were in the Darke/Mercer areas. Yields reflected positively on the growing crop manure application. Bottom line is that the manure did very well. Glen will be back for our December meeting to make a more complete presentation of his results. We sure appreciate Glen's work in the watershed considering the distance he needs to travel to conduct trials and attend out meetings.
  - **Greenleaf Advisors - Gypsum test plots** – Did not discuss
  - **Transfer manure out of watershed** – Some manure is being transferred due to the CNMP's. People are finding that transferring manure is more cost effective than thought but still much work to do in this area.
  - **Organic Pond progress** – Organic Pond has a ceramic that supposedly can trap phosphorous in a tile. Terry has been unable to firm up essential data regarding costs, and performance in real world applications. Also briefly discussed their carp harvesting project. Tom Rampe reported that they have problems getting permission from Fish and Wildlife who do not allow commercial fishing in any inland lake in Ohio. Carp harvesting is considered commercial fishing. No one attending was exactly sure where Organic Pond is on these projects.

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- **Plug-Flow Digester** – Bill Knapke knows the Wennings in Fort Recovery who operate a plug-flow digester on their farm. Bill did not know how the unit was working. Jim Keller committed to do some research on the various forms of digesters. We can also experience how such a unit works on our visit to BioTown.
  - **Lake Facilities Authority (LFA)** Jared Ebbing reported that the LFA would be an official entity that can apply for and receive grants. They could possibly fund positions such as Milt Miller's or even (eventually) someone to coordinate the efforts of Ag Solutions. A problem at this stage is that the discussions get muddled by fear of taxation. Not sure where this will all lead but the Jared noted that were the LFA in place, it would be an ideal entity to properly coordinate the \$2.1 million that was recently appropriated for a wetland. For example, this money could be used as match money to access additional grants for the lake and watershed.
  - **Meeting with commissioners** - On September 24, 2013, Brother Nick Renner and I met with the commissioners. The purpose of the meeting was to request that they considering replacing Jim Hoorman with a full time individual who would be dedicated solely to Mercer County (and the entire water shed) Ag nutrient issues. I envisioned this person working in Jared Ebbing's Economic Development office. The commissioners advised that funding was not available for this approach. Since the meeting I've spoken with a couple of individuals who have suggested really good ideas for how to proceed to keep Ag Solutions vibrant and how to acquire an individual who can evaluate, with our farmers, the most workable of the many approaches we're aware of. I need to expend the time and energy to implement their suggestions.
7. **Updates from the floor** – Lou Brown's July sown oats is now knee high after looking bleak for some time due to lack of rain. Will get a cutting of good feed off of it. September oats and radishes about six inches high. Lou tried a product from Italy designed for root growth, which in a controlled field trial added about one to two bushels per acre – not a great improvement. Maybe better next year. Lou announced a gathering at a Winner farm in Logan County being held on Wednesday 11/06. My recap is too late to inform anyone so not providing details. Lou shared a new approach to preparing feed. He is mixing 20% soybeans, 80% corn and 328 pounds of water to make a one ton batch. The mixture is run through a bean extruder and then ground. Lou sent samples of the resulting feed to a lab for nutrient analysis. Lou noted that his herd is down 4- 5 lbs on milk production. Production will not return until the silage ferments so he is experimenting with different approaches to improve his milk production. Extruding the feed with added heat increases the nutrient value above that resulting from simply grinding the grain.

Meeting adjourned at 09:50pm

Next meeting will be held at 8pm, Monday evening December 02, 2013 in the Chickasaw Library

Submitted By  
Jim Keller  
Maria Stein, OH