NCERA013 Meeting Minutes 28 August, 2012
The Pyle Center, Madison, WI

The annual meeting was in conjunction with the SERA-6 and NECC-1012 groups. The agenda for the meeting is at the end of these minutes.

Minutes prepared by Fabián Fernández (secretary)

Present:

Jean Bernius – Elementar Americas
Jon Dahl – Michigan State University
Fabián Fernández –University of Illinois
Jerry Floren – Minnesota Department of Agriculture
Robert Florence – Kansas State University
Dave Franzen – North Dakota State University
Ron Gelderman – South Dakota University
Brad Joern – Purdue University
Daniel Kaiser – University of Minnesota
John Lee – Polarcomm.com
Carrie Laboski – University of Wisconsin-Madison
Renuka Mathur– Iowa State University
Manjula Nathan – University of Missouri
John Peters – University of Wisconsin-Madison
Tim Shaver – University of Nebraska-Lincoln

Meeting started at 8:15AM

Meeting was called to order by John Peters

Minutes from the previous meeting were approved

Current officers and rotation schedule was reviewed
Sequence for chair, based on two year term following the federal fiscal year (Oct.-Sept.) is as follows: 10-12 WI, 12-14 MN, 14-16 IL, 16-18 OH, 18-20 KS, 20-22 SD, 22-24 IA, 24-26 ND, 26-28 MO, 28-30 NE, 30-32 MI, 32-34 IN.

Since there is not a member from Ohio, the incoming secretary will be from Kansas, which is the next state in the sequence.

Ken Grafton was not present to provide the Administrative Advisor's Report.

State Reports:

Illinois

Illinois does not have a state-supported soil test laboratory, so there are no samples or analysis numbers to report. The 2011 fall started with an early harvest and was prolonged by warm and dry conditions. There were many fields that were soil sampled in the fall. This growing season started with soils that were not fully recharged with water due to the dry fall and winter. The dry conditions that prevailed during the spring prevented nitrate leaching. Unfortunately, the dry conditions persisted throughout most of the growing season. In many places this has been one of the worst droughts on record and crop yields will be substantially reduced. The southern part of the state was the most affected. Some fields never reach the flowering stage.

The Fertilizer Research and Education Council (FREC), which administers the check off funds for research from fertilizer sales has been changed by a recent Bill signed by the Governor or Illinois. The new entity that will oversee the use of funds is a non-government institution called the Nutrient Research and Education Council (NREC). The NREC is made up of voting members from the industry and grower organization, and other non-voting members from the Illinois Agriculture Experiment Station and environmental groups. The new NREC will have initially between 3.5 to $4 million per year for research, which is a very substantial increase relative to FREC. The leadership to produce this change in the legislation was provided by Jean Payne, President of the Illinois Fertilizer and Chemical Association (IFCA).

We are currently conducting substantial work on corn response to sulfur fertilization, nitrogen inhibitors, and the re-evaluation of our P and K recommendations that were developed more than 40 years ago.

Indiana

Significant efforts are underway to strengthen our relationship with the four commercial soil testing laboratories in the state to develop a laboratory certification program in response to the recent NRCS 590 standard. One project evaluating soil test phosphorus relationships with soluble phosphorus measures and another project evaluating Ca:Mg ratios are currently underway. The two largest laboratories in the state analyze hundreds of thousands of soil samples from Indiana each year, and the number of samples analyzed has increased by about 10 percent compared to 2011. In addition, more soils testing low in phosphorus and potassium have been submitted in the last two years. The increase in soil sample numbers is likely due to more intensive soil sampling as producers try to increase fertilizer use efficiency in light of increased fertilizer costs. The increased number of low testing soil samples may be due to bringing marginal lands into production as a result of higher commodity prices and an increase in the amount of rented land in production. Both laboratory managers expressed a strong desire to be more actively involved in NCERA013 in the future and hope that NCERA013 meeting times can be moved from late fall as this is their busiest time of the year.
The Department of Agronomy at Purdue University is conducting a search for a crop eco-physiologist faculty position with interviews scheduled for late fall 2012.

Iowa

Prepared by Antonio P. Mallarino and Renuka R. Mathur.

1. Update for the ISU Soil and Plant Analysis Laboratory (SPAL):
The lab is on the path of recovery from problems created by years of lack of investment and the void in management. Dr. Renuka Mathur took charge of the lab as the Laboratory Director in April 2011. Last year the department made a decision to temporarily support the lab financially, so we could replace hourly students with more stable and qualified technicians and replace old equipment that was creating problems with the sample flow and testing quality.

The following table summarizes the numbers and distribution of samples analyzed in 2011.

Sample Type	**Research/State**	**Farm/Lawn**	**Total**	**%**
Soil	12855	4569	17424	50
Plant	2912	1300	4212	12
Saturated media extract	9	5	14	<1
Saturated paste		32	32	<1
Slurry	232		232	1
Limestone	200	5	205	1
Client 'Do-it-yourself'	3072		3072	9
TC/TN pre-weighed	4755		4755	14
Solutions	4886		4886	14
Total	**28921**	**5906**	**34832**	

The following summarizes major developments:

1. The SMP buffer was replaced by Sikora buffer.
2. Two instruments, CNS analyzer and Lachat flow-analyzer, were purchased to increase the efficiency and productivity in the laboratory.
3. Purchased an automated diluter to improve laboratory efficiencies.
4. A Research Associate and Post-doctoral Associate were appointed.
5. Internship program in the laboratory was implemented.
6. Continued developing the teaching mission of SPAL by integrating better laboratory activities with academic courses as directed group study or/and individual research projects where students get hands on training on equipment and methodologies.
7. The laboratory custom analyzed approximately 460 slurry samples for Dr. Mallarino's group in June 2011, and will analyze more this year.
8. Evaluated and established biochar testing methodology.
9. Currently evaluating repeatability of hot water B determination method.
10. Cost analysis of service fees was performed, and new fees will be implemented soon.

Next steps include:

1. Switch the default P test for farmers/lawn samples from Bray-1 and Olsen for samples with pH> 7.3 to Mehlich. Not sure what we will do about K and cations yet (currently the default is the ammonium acetate test).
2. Website and Laboratory information management system upgrade.
3. Evaluate organic matter determination by the LOI method for farmer/lawn samples
4. Increase lab visibility.

2. News about private laboratories soil-testing and state soil-test certification:

Two previously independent laboratories based in Iowa, Belmond and LGI, were bought by AgSource (or merged) and now continue to operate from LGI's old location.

A private laboratory (Solum) is opening a laboratory in Ames this fall (it begins operating in early September), which will be using only the field-moist sample preparation method. This is the old NCER-13 supported method, with direct-sieving or slurry versions that give the same results, and the one Ron Gelderman and Antonio Mallarino are including in the chapter of the methods book that is being revised. This lab will be using the slurry version using their proprietary "slurry machine" (Antonio has collaborated with them by exchanging samples).

Solum is already participating in both, the NAPT and ALP, proficiency testing programs by analyzing dried soil samples. For now, the certification offices of both states have accepted to consider Solum certification based on analyses of dried samples, which will be analyzed in the Ames lab. Both states have asked Antonio for his opinion. Antonio stated that there is nothing more that can be done at this time as labs are certified based on few tests and the labs are free to choose the tests required for certification. He believes that Solum has a similar agreement with Nebraska.

3. Research/extension update:
The department continues to have budget issues and we continue to lose soils faculty. A soil survey/classification faculty member (Dr. Jon Sandor) and two soil fertility faculty member (Drs. Stan Henning and Randy Killorn) with mainly teaching appointments retired in the last 18 months and currently there are no replacement plans for any of them. For the first time in 50 years the graduate fertility course "Soil Plant relationships" is not being taught this fall. Contrary to expectations, however, Ag Extension has not seen further cuts (but no increases) since last year and one vacant Field Agronomist position was filled. A new ISU president started this summer, with some Extension background, so we all hope for better times for Extension.

Applied fertility research (mainly by Drs. Mallarino and Sawyer) work continues on N, P, and manure agronomic and water quality issues; impacts of bioenergy production on soil and water quality; and K, Lime, and S agronomic issues for corn and soybean. Dr. Sawyer began a project to study cover crops (winter rye) effects on N needs of corn and on use of Instinct nitrification inhibitor with UAN and liquid swine manure. Dr. Mallarino finishes this year a 6-year on-farm project to study optimum pH for corn and soybean, which essentially confirms current ISU recommendations. He re-initiated research on the field-moist test for K and other nutrients, in partial collaboration with a private lab that begins operations in Ames this fall. Projects are underway to study corn and soybean response to several micronutrients applied to soil or foliage, hopefully to calibrate soil and plant tissue tests for these nutrients.

Kansas

Prepared by Dave Mengel.

The K-State Soil Testing lab provides soil, plant and water testing services to support extension and research activities for K-State faculty and analytical services for a number of state and

federal agencies. In addition, the lab does soil testing for the general public and analytical service work for industries, universities and agencies outside Kansas.

Funding: The lab is a 100% fee supported activity, with the exception of salary of the faculty member assigned to the project (Mengel, 20% time assigned) and a portion of the salary of a Research Assistant (Florence, 0.8 time). The lab is financially stable. We are considering some changes in the fee structures to encourage more use of plant analysis, and develop "packages" of analyses to reduce costs for researchers.

Personnel: Current staffing includes Dave Mengel as faculty supervisor; three analysts, Kathy Lowe, Lynn Hargrave and Jacob Thomas (starts September 4); a ¾ time secretary, Melissa Pierce and a PhD student/RA, Robert Florence. In addition, 4-6 students regularly work in the lab. Turn-over in the lab analysts has been an issue over the past few years.

Robert joined the lab in August 2011 from Auburn University to replace John Hoben who resigned in December 2010. John is currently working on a PhD in organic chemistry at the University of Kentucky. Robert's responsibilities in the lab are focused on quality control, fertilizer recommendations and method development.

Sample volume: Sample volume was increased slightly each year since 2007. In FY 2012 we handled approximately 18,000 samples for farmers and homeowners. A similar volume of research and agency samples are also run each year. Plant analysis work is also increasing. We provide free diagnostic services for county agents and state specialists, which comprises 200-300 plant and soil samples annually. We also have been making a point of emphasis in extension programming to focus on plant analysis rather than soil testing for many of the secondary and micronutrients.

Research projects: We continue to work on our fertilizer recommendations. Sensor based N recommendations for wheat and grain sorghum went on line in 2009. We are still working on updating our down loadable fertilizer recommendation program. We are doing some field work on annual forage crops, particularly sorghum and millet based forages. We have completed a review of our pH and lime recommendations and a review of the N and P recommendations for our major crops, corn, wheat soybeans and sorghum are in various stages of completions.

Robert has completed a review of LOI vs Walkely-Black for SOM, and has developed a method we are confident will work for us. Now that we will be at full staff, we will do a direct comparison of the two this fall with the goal of switching our routine SOM testing to LOI. We will continue to offer SOM by Walkely-Black for farmers and researchers, but at a higher charge, reflecting our true costs.

We also are in the final stages of developing environmental metal analysis for metals such as Pb, Cd, Zn, and Ni. This will use a 4 hour digest with nitric acid and analysis on ICP. Target users are urban homeowners.

We also will start some method comparison for pH and lime requirement. We still use the SMP, and are not comfortable with a mimic (Sikora) due to the issue of underestimation of lime needs on low CEC soils.

Equipment upgrades: Over the past five years we have upgraded our ICP, LECO, AA and lab driers and grinders. We are currently in the final stages of replacing our Labfit 3000 and hope to have a replacement on line by the end of the year. We finance all of our equipment upgrades and major maintenance of infrastructure by setting aside 10% of our gross operating revenue for equipment and infrastructure updates.

General Comments:
Leadership: K-State Agriculture is currently in a leadership transition. Dr. John Flores, a Food Scientist from Penn State, started as our Dean of Ag august 1. Gary Pierzynski, who served as interim Dean for 2 ½ years has returned to the department as Head.

Funding: Like most landgrants, we have suffered some severe budget cuts, over the past decade. Most regular faculty and staff have not seen salary increases for two or three years, and most support positions have been moved to soft money. The department has closed two experiment fields and combined operations at two others. In May the legislature started a process of eliminated state the income tax with the goal of increasing economic activity and investment in small business. No alternative revenue streams have been proposed. Stand by, it could get interesting.

Faculty: We are hiring. Agronomy has hired several new faculty over the past 2 years, and has several active searches underway or being initiated. Recent hires include, KRV Ex Field Agronomist, Forage Teaching, Weed Physiology research, Environmental Science Ext, NW Area Ext agronomist and Micro-Met. Active searches include Cropping systems ext, climatology, SW Area Ext Agronomist, and SC Exp Field Agronomist. This is exciting as total faculty numbers are finally rebounding and the mix of junior/senior faculty has changed dramatically over the past 5 years. We are rapidly becoming a very young department.

Michigan

The lab has taken a hit in sample numbers from homeowners and farmers as the Extension service has gone through its' reorganization. County offices are no longer accepting samples from clients to mail to the lab. Sample numbers to the lab are down approximately 30% over the past two years to about 11,000 samples this past year. This has been offset by an increase of about 10% per year of research soil testing within our department and other departments on campus over the last 3 to 4 years. The self-mailer program has been expanded from lawns and gardens to include flowers, trees, shrubs and fruit crops. A Master Gardener Hotline was set up to answer questions from homeowners related to soil test results.

We have also noticed a decrease in pre-sidedress nitrate test samples since moving to the Maximum Return to N (MRTN) nitrogen recommendation philosophy. Numbers have gone from 800 to 1000 per year down to 300 per year. Since 50 to 60 pounds of the N credit are built

into the initial nitrogen recommendation farmers see less value in doing the pre-sidedress test. Have done about 20 corn stalk samples for feed with about 1/3 coming back with nitrates in the high range.

Departmental News – still looking for a new College of Agriculture Dean. The interim Dean, Doug Buehler, is not interested in the position. Have had some interviews, but are still looking for the right individual. Janet Lewis (Wheat Breeder) left last year and the department is currently going through interviews for a replacement. Andrey Guber joined the department in August, 2011 as a researcher in the area of modeling water flow, solute transport, and microbial transport in soils. Wei Zhang was hired in the area of soil physics and unsaturated hydrology. Kim Cassida was hired as a Forage Management Academic Specialist in June, 2012. Emily Merewitz was hired for the Molecular Physiologist in Turfgrass position. As of July 1, 2012 the Crop and Sciences Department merged with the Plant Pathology Department to become the Plant, Soil and Microbial Sciences Department.

Minnesota

As of January 2012 our lab manager Roger Eliason has retired. We currently have two new individuals managing the lab. The primary manager is Brian Barber whom was working for the department of Soil, Water, and Climate as a research associate. The second new person is Keith Piotrowski whom also was a research associate in the department. Along with Roger, three other long time employees have retired so there has been a lot of change in the lab. The college is supportive of maintaining the lab and has invested in equipment. There are not talks of closing the lab as it has been maintaining itself. There is no data on the lab volume but the majority of samples are research and lawn and garden samples. Across the state sample numbers are up. With the new lab personnel the lab is looking at other possible tests to offer, but nothing has been set yet as to what they may be offering to customers other than current analyses. We have been seeing an increase in the number of plant tissue samples taken early season. We currently have not guidelines on using plant analysis for determining fertilizer recommendations. Currently we are summarizing data from current and previous years to look at correlations in tissue concentrations and yield. I am expecting the number of plant and soil samples to remain strong.

Missouri

The University of Missouri Board of Curators appointed Timothy M. Wolfe as the 23rd president of the University of Missouri System, effective Feb. 15, 2012. Timothy M. Wolfe served as an executive with proven expertise in recruiting, building and leading successful teams, and has extensive experience in information technology, infrastructure software, consulting and sales leadership.

Even though Hiring freeze is in effect at University of Missouri due to the budget situation, the Division of Plant Sciences was able to get two faculty positions released under the Compete Missouri Program. The Division has completed the interview process for the Asst. Professor and

State Cereal Crops Extension specialist position. Interview process is going on for the Asst. Professor of Forage Physiology position at Columbia Campus. The budget situation remains tight and President Wolfe has requested that we continue with restrictions on spending to manage with the budget cut from State funding. The state had 7% cut for Higher Education and it was better than the anticipated. Since the state had a drop in revenue than expected, now the Governor is withholding 1% of the funding back.

The severe drought conditions and more than 105 degree F that persisted for weeks in June-July in Missouri resulted in crop failure and farmers have been cutting corn for silage. Since nitrate poisoning of cattle was a problem in the state, the lab received lot of samples for nitrate testing in silage and chopped corn stalks.

The MU Soil and Plant Testing Lab and had another very productive year in 2011. There was a significant increase in the number of samples received by the MU Soil and Plant Testing lab from 2010 to 2011.The MU soil and plant testing lab at Columbia campus analyzed a total of 25,913 soil samples (13% increase), 3847 special soil tests (115% increase), 1908 plant (24% increase), 1820 water (149% increase), 44 greenhouse media, 65 compost, 167 manure and 299 environmental tests. The soil testing lab at Delta Center, Portageville analyzed 10,773 soils samples. Both labs together analyzed a total of 37,044 soil samples in year 2011. The lab purchased a Vario Max CNS analyzer, Block Digester BD40HT Unit with controller from Lachat/Hach, and a Thermo Scientific MaxQ shaker. Environmental soil testing and providing total carbon, nitrogen and sulfur by combustion method using Elementar CNS analyzer were good additions to the services offered by the MU soil and plant testing lab. A web based soil test database and recommendation program development is underway and should be completed by next year. The lab had a financially sound year. MU soil testing labs continues to function as a totally self supporting lab with fee generation and maintains an excellent budget.

Research is under way on nutrient management of bio-fuel cropping system. Due to the BCAP program and interest in growing bio-fuel crops for marginal lands in Missouri here is more interest in miscanthus and switch grass, we established plots to conduct P and K fertilizer rate study to come up with P and K recommendation. Completed the field calibration study on lime method development using different buffer tests and is currently in the process of publishing the work and implement changes in the lab methods.

Nebraska

No report.

North Dakota

North Dakota State University continues to maintain and support the NDSU Soil Laboratory. The lab is operated by Larry Swenson, who has operated the lab for well over twenty years. The lab also has two full-time employees and several seasonal workers. Sample numbers have increased in recent years due to increased awareness and acceptance of the need for soil sampling to improve fertilizer use efficiency.

This past legislative session (the North Dakota legislature meets once every two years), a grass-roots promoted Soil Health Initiative was passed and resulted in funding for new soil science researchers and extension specialists within the North Dakota State University Ag Experiment Station and Extension systems. We have hired a Soil Health Team, consisting of a tenure-track researcher and a tenure-track extension specialist in the campus Soils Department; a soil scientist at the Carrington Research and Extension Center; an extension specialist in soil health at both the North Central Research and Extension Center in Minot and one at the Langdon Research and Extension Center. In addition, a natural resource management scientist was hired for Hettinger Research and Extension Center, and will be collaborating with the Soil Health team on soil issues affecting wildlife habitat. The Soil Health team will address research and extension needs in soil salinity and sodicity management and remediation. Soil salinity and sodicity adversely affects crop and range yield on millions of acres within the state, and the acres have increased greatly within the past twenty years. The team will be addressing a variety of issues related to salinity and sodicity including determining cation ratios related to dispersion affects in North Dakota soils.

South Dakota

1) The SDSU Soil Testing and Plant Analysis Laboratory was closed to commercial analysis as of October 2011. Financially, the lab was in the black. The lab is still analyzing research/extension samples.
2) In addition, The Olson Biochemistry Lab (Feed, Water, Manure, Pesticides) was closed as were two research field stations.
3) On the Extension side, all field extension personnel were dismissed and ~65 were hired as "field specialists" at 8 regional centers. There are 12 area "Agronomy" specialists covering pathology, entomology, soils (1 not yet filled) and crops. Administratively, they are under the Plant Science Dept. Previously, there were 24 county agronomy educators.
4) Horticulture, Forestry, Landscape was merged with Plant Science Dept (now about 60 faculty members)
5) All instructional and most Expt. Station Faculty were converted to 9 month positions.
6) Plant Science Staff changes
    a) The extension Agronomist will come on board this fall.
    b) The extension Entomologist, Ada Szczepaniec, came on board this spring
    c) Still looking for an extension Pathologist
    d) Still looking for a Soils extension fields specialist
    e) Finished interviews for research/teaching Soil physics position (retirement).
    f) The Forage research/teaching position (Vance Owens) is open. No decision yet on refilling.
7) Dean asking legislature for extra 1 million funding for Ag. Expt. Station.
8) SD Ag. Business Assoc. will ask legislature for fertilizer checkoff to be used for research at SDSU. Could raise $300,000.

Most of the southern 1/3 of SD is under extreme drought conditions. Many fields did not set an ear. The northern third, although short of rainfall, will have average or above average row crop yields. The middle of state falls in-between these extremes. Winter and spring wheat yields were good to excellent with little disease pressure. Expecting carryover nitrogen to be higher

than average (~70 lbs/a in 2 ft.) after drought stressed fields. Will be difficult to gather this data without a commercial analysis laboratory.

Wisconsin

Dean Molly Jahn stepped down in 2010 and was replaced by William Tracy as interim dean. This past March, Kathyrn VandenBosch began her duties as the new Dean of the College of Agriculture and Life Sciences. Prior to accepting the position at the UW she was professor of plant biology at the University of Minnesota in St. Paul. On July 1, 2012 Francisco Arriaga began his duties as an Assistant Professor in the Department of Soil Science. His research supports the development of management systems that promote crop productivity, as well as soil and water conservation. Interests include tillage, soil compaction issues, crop residue management, cover crops, and water quality and quantity issues.

The University of Wisconsin-Madison continues to operate two soil-testing labs: the Soil and Forage Analysis Lab in Marshfield and the Soil and Plant Analysis Lab in Madison. There is an ongoing review of the laboratories initiated by the dean's office. The review committee is looking at a number of aspects of the lab including program, extension function, and mission with the goal establishing recommendations for the future. This past year the lab's website was completely revised which has enhanced the usefulness of the site for lab clients as well as for extension purposes. In March 2012, a new fee schedule of services was implemented which reflects current costs and allows for discounts for volume as well as a reduced fee for samples that come to the lab prepared (dried and ground). The UW lab continues to assist the Wisconsin Department of Agriculture, Trade, and Consumer Protection (WDATCP) soil testing lab certification program. Currently, publication A2809 "Nutrient application guidelines for field, fruit and vegetable crops in Wisconsin" is being revised with the goal of having the new guidelines in place for the 2013 growing season.

Sub-Committee Reports:

A. Buffer pH

John Peters indicated that revisions were made to Chapter 4 of Publication 221 for pH and Lime Requirement. The Sikora and modified Woodruff methods for buffer pH are now included.

B. Education

One of the key roles of this committee has been coordinating the laboratory workshops. The pattern has been to hold these in odd numbered years so following that pattern we are due to hold one in 2013. The Education Committee will work with the full committee in selecting a date and then begin the process of putting together an agenda for a workshop that will likely be held in late February or very early March. This workshop will follow the annual meeting of the NCERA-13 committee as has been done in the past.

The phosphorus regional publication: Antonio Mallarino is taking the lead to write the first draft. Brad Joern indicated that he would be willing to do the first version if that helps speed up the process.

End of season stalk nitrate test. Robert Mullen was planning to initiate this effort before he moved. The committee agreed that it would be beneficial to develop a white paper on the subject. Brad Joern will find out from Jim Camberato if Indiana has recent data and report back. If there is data from Indiana, Brad indicated that he would write the first draft to circulate to the committee. Carrie Laboski and Dan Kaiser may be able to contribute some data as well.

C. Publication All

1. NCR 221

Chapter 1, Soil Sample Preparation. Ron Gelderman sent a revision of to the committee a few days before the meeting.

Chapter 6, Soil Phosphorus. Antonio Mallarino and Manjula Nathan are working on the update. Manjula is currently waiting on getting revisions from Antonio.

Dave Franzen requested additional feedback on the draft of chapter 8, Sulfate-Sulfur, he sent several months ago. Only two states have submitted feedback or edits.

2. Progress on committee goals for 2011-12

See item 1 above.

3. White paper – Conducting On-farm trials

Several trials are being conducted in Indiana and Illinois. There was no recollection from the committee regarding the need to prepare a white paper on this subject.

D. Manure. Standby.

E. Website. Manjula Nathan continues to maintain the site.

F. Sensing. Standby

G. K Testing – moist soil

Ron Gelderman briefly explained the sample preparation procedure. Brad Joern, Carrie Laboski, Fabián Fernández, Ron Gelderman and others expressed concern that including the methodology in the publication would be rushed. Dave Franzen, suggested that it would be good to still include it just so people can use it, realizing

that this is not the only methodology available. The general agreement was that putting on the stamp of approval on the procedure might be too rushed simply because Iowa is the only state with information and Antonio Mallarino, who has the most experience on the procedure, was not present at the meeting. A sample exchange program across states was identified as a potentially important activity for the committee. Because of the lack of time to properly discuss the issues and some of the above mentioned concerns, the committee agreed that this discussion should continue as a top priority at our next meeting.

H. Seasonal Variability in P, K and pH

Dave Mengel is currently working in conducting research on Correlation and Calibration of Soil Test for Recommendations.

I. Proficiency Testing/NAPT

Brad Joern reported on recent telephone conferences of the NAPT group. There will be another meeting in February 2013. Most of the discussion of the last conference revolved around issues related to sample shipment to Canada. There was no resolution. There was also a discussion about the PAP and certification programs with the NRCS 590 standards.

Discussion on impact of dry weather on soil test results:

No discussion.

Future Direction and Initiatives:

In 2013 we should have the workshop with the labs in conjunction with the annual meeting. February 25-27 or March 4-6 are possible dates. A pole will be sent to committee members to identify the best possible date. The location could be possibly changed as several committee members expressed concern about the condition of the facility used in Bettendorf.

There was a group discussion about putting in a real-time News Letter clearing house in the website as an easy to go place for information for the region and to increase traffic and use of the website. There was no resolution.

In the joint group meeting there was a presentation by Jake Mowrer and David Kissel on the use of NIR technology in soil testing for organic matter and organic nitrogen. The question was asked if the committee should work on this procedure to include in the procedures publication. It was decided that this could be an item for next meeting.

Dave Franzen brought up the issue that tissue testing is being done indiscriminately in much of the region. There is a need for the committee to evaluate plant analysis values and establish critical nutrient level ranges. The committee decided that a white paper on the usefulness of tissue testing as a tool, how to collect samples, and interpret values would be important. Dave Franzen will lead the data collection to present preliminary results in our next meeting. Carrie Laboski, Dan Kaiser, and Fabián Fernández will also contribute to this effort.

Committee Assignments

Education: John Peters (ch), Antonio Mallarino. Moving forward.

Buffer pH John Peters (ch), Carrie Laboski, Dave Mengel, Manjula Nathan. Standby.

K Testing –Moist Soils: Antonio Mallarino (ch), Carrie Laboski. Wait till February meeting.

NAPT liaison: Brad Joern. Moving forward.

Sensing: Dave Mengel (ch), Manjula Nathan, Ron Gelderman, Jon Dahl. Stand by.

Website: Manjula Nathan (ch), Antonio Mallarino. Moving forward.

Manure: John Peters (ch). Stand by.

AGENDA

NCERA 13, SOIL AND PLANT ANALYSIS COMMITTEE MEETING
Tuesday, August 28, 2012
The Pyle Center
Madison, WI

The NCERA 13 Committee is meeting in conjunction with the multi-regional meeting of the Soil and Plant Analysts Work Groups, which will be held on August 27-29, 2012. The NCERA 13 committee meeting will begin at 8:00am on Tuesday, August 28 and conclude by noon on Tuesday.

NCERA 13 Business Meeting:

1. Review and approve minutes of the February 21-22, 2011 meeting.
2. Review of the rotation of offices and current status.

Current Chair – John Peters, Wisconsin (2010-12)
Current Vice-Chair – Daniel Kaiser, Minnesota (2010-12)
Current Secretary – Fabian Fernandez, Illinois (2010-12)

Sequence for chair, based on two year term following the federal fiscal year (Oct.-Sept.)

10-12 WI	22-24 IA
12-14 MN	24-26 ND
14-16 IL	26-28 MO
16-18 OH	28-30 NE
18-20 KS	30-32 MI
20-22 SD	32-34 IN

3. Administrative Advisor's Report. — Ken Grafton
4. State Reports. (*Bring printed copy for Secretary*) — State Reps
5. Sub-Committee Reports:
    - A. Buffer pH — Peters
    - B. Education — Peters
    - C. Publication — All
        1. NCR 221
        2. Progress on committee goals for 2011-12
        3. White paper – Conducting On-farm trials??
    - D. Manure — Standby
    - E. Website — Nathan
    - F. Sensing — Standby
    - G. K Testing – moist soil — Mallarino
    - H. Seasonal Variability in P, K and pH — Mengel
    - I. Proficiency Testing/NAPT — Joern

5. Impact of dry weather on soil test results All

6. Future Direction and Initiatives. All

Committee Assignments

Education: John Peters (ch), Antonio Mallarino

Buffer pH John Peters (ch), Carrie Laboski, Dave Mengel, Manjula Nathan

K Testing –Moist Soils: Antonio Mallarino (ch), Carrie Laboski

NAPT liaison: Brad Joern

Sensing: Dave Mengel (ch), Manjula Nathan, Ron Gelderman, Jon Dahl

Website: Manjula Nathan (ch), Antonio Mallarino

Manure: John Peters (ch)

Annual Report: John Peters (ch), Daniel Kaiser, Fabian Fernandez

NCERA-13, SERA-6, NECC-1012
Joint Work Group Meeting

UW-Extension Pyle Center
Madison, Wisconsin
August 27-29, 2012

Monday afternoon – Joint Work Group Sessions

1:00 Welcome and Introductions – John Peters

1:15 Soil test K research update – Carrie Laboski and Antonio Mallarino

2:00 Sulfur needs of alfalfa; Tools for sulfur management – Quirine Ketterings

2:30 The use of NIR technology in soil testing – Jake Mowrer and David Kissel

3:00 Break

3:30 Nutrient removal database project and NuGIS –Manjula Nathan and Steve Phillips

4:00 Soil testing options for high tunnels – Bruce Hoskins

4:30 Short presentation by sponsors

5:00 Adjourn

5:20 Board bus for short trip to Betty Lou Cruise dock

6:00 Dinner Cruise on Lake Mendota

Tuesday, August 28, 2012

8:00 Welcome from John Shutske - Associate Dean and Program Director, Agriculture and Natural Resources Extension & Outreach, College of Agricultural and Life Sciences

8:15 Individual State Sessions

10:00 Break

10:15 Short presentation by sponsors

10:45 Individual State Sessions continue

12:00 Lunch – Pyle Center

1:00 Depart on bus for tour of Crave Brothers Dairy Operation

5:00 Dinner on your own in Madison

Wednesday, August 29, 2102

Joint Work Group Sessions

8:00 MAP update – Jerry Floren

8:30 ALP update – Bob Miller

9:00 NAPT update – Grant Cardon

9:30 NAPT database – Frank Sikora

10:00 Break

10:30 Panel on status of method development and manuals in each region. Is there potential for a national manual?

SERA-6 – Frank Sikora
NCERA-13 – Brad Joern
NECC-1012 – Bruce Hoskins

11:30 Open discussion and wrap-up

12:00 Adjourn